

district." With a view to encourage female education he has, however, arranged for special rewards, both to successful teachers and pupils, but he is afraid that it will take time before it becomes popular.

143. The number of technical schools has advanced from 44 to 47 and their pupils from 311 to 395. This increase is shared by Lohardaga, Palamau, and Singhbhum. Special or technical education. In Manbhum there was a decrease of 2 schools, while in Hazaribagh the number remained unchanged. The roll number of the Ranchi industrial school on the 31st March last was 29 against 27 in the previous year. The school credited into the Lohardaga treasury on account of sale-proceeds of manufactured articles Rs. 1,516 against Rs. 1,139 in the previous year. It continues to be efficiently managed and supervised under its Superintendent, Mr. D'Silva, and Secretary, Babu Raicharan Ghosh. During the past year two pupils were sent from the school to the Sibpur College to finish their training there.

144. The cost of education during the past two years is compared below:—

CLASS OF SCHOOLS.	1893-94.			1894-95.		
	EXPENDITURE FROM—			EXPENDITURE FROM—		
	Provincial revenue.	Municipal fund and private sources.	Total.	Provincial revenue.	Municipal fund and private sources.	Total.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Secondary ...	27,333	52,551	79,884	30,103	53,895	83,998
Primary ...	48,862	72,769	1,21,631	52,801	86,787	1,39,588
Female ...	6,269	9,074	15,343	5,877	7,958	13,835
Special ...	7,240	2,019	9,259	8,227	1,991	10,218
Scholarships ...	6,942	502	7,444	6,128	526	6,654
Buildings ...	4,283	1,608	5,891	3,437	2,402	5,839
Furniture and apparatus ...	876	149	1,025	1,817	384	2,201
Miscellaneous ...	9,045	524	9,569	8,768	15,672	24,440
Superintendence ...	37,881	288	38,169	40,256	273	40,529
Total ...	1,48,731	1,39,484	2,88,215	1,57,414	1,69,888	3,27,302

There has been an increase of Rs. 39,087 in the total educational expenditure. The increase is due to grade increments and increase in the pay of teachers, additional primary grants of Rs. 3,000 and Rs. 2,000 in Lohardaga and Manbhum, respectively, and sanction of special grants for repairs of buildings and purchase of furniture, &c. It is satisfactory to note that while the contribution from Provincial revenues has been raised by only 5·8 per cent., that from municipal and private sources has increased by 21·8 per cent.

145. An important feature in the educational reports is the continued increase in the number of primary schools which are especially wanted in a country where the population is mostly agricultural, and the addition of 191 schools following on that of 89 in the previous year shows a result which must be regarded as extremely satisfactory, having regard to the opposition which schools receive from parents whose children's services are required for tending cattle and tilling the ground. There has also been a further advance in female education, but from a school-master's point of view the matter for most congratulation is the unqualified success of the boys in the zilla schools at the Entrance examination, a result which the head-masters very naturally plume themselves on as testimony to their excellent system of teaching. During my tour last cold season I had occasion to pass through a portion of the Raigurh State, and was much struck by the superiority of their village schools over those in Chota Nagpur and other parts of Bengal. The school-houses are altogether much cleaner and neater and the walls are ornamented with coloured drawings of animals and plants, the work of the boys and

masters, and by the excellent plan adopted some knowledge of the fauna and flora of the country was imparted under the guise of practical instruction in the art of drawing. The boys are also carefully trained in physical exercises and drill, *kusrat* and *kawayat*, and the performances they exhibited on the play-ground were of no mean order. On my arrival the boys were drawn up in line outside the school, and after telling off by numbers sang "God save the Queen" in a manner which did more credit to their loyalty than their musical attainments.

The aboriginal boys of the Ranchi Anglican Mission have come very much to the front in the matter of foot-ball and hockey. They lately had the pluck to enter into competition in the latter game with the European clubs in Calcutta for the Beighton Challenge cup, and though they were beaten it was only by a very narrow margin. The Revd. E. H. Whitley, who conveyed the Ranchi team to Calcutta, provided object lessons for them in the shape of visits to the mint, a P. and O. vessel, the Zoological Garden and a trip down the river. A course of instruction of this kind cannot fail to be beneficial.

#### XXVII.—DISPENSARIES AND HOSPITALS.

146. There are dispensaries in the towns of Hazaribagh, Chatra, Burhi, and Giridih in the Hazaribagh district, at Ranchi and Lohardaga in Lohardaga, at Daltonganj in Palamau, at Purulia, Jhalda, Raghunathpur, Barrabazar, Gobindpur, Pandra, Jheria, and Topechanchi in Manbhum, and at Chaibassa in Singhbhum. No new dispensary or hospital was opened during the year.

147. The total income of these dispensaries amounted to Rs. 19,195 made up of Rs. 8,285 from municipal funds, Rs. 8,308 from private subscriptions, and Rs. 2,602 supplied by Government, against Rs. 7,252, Rs. 9,288, and Rs. 1,748, respectively, from the same sources in the previous year. The Government contribution consists of the diet expenses in police cases and the cost of registers and forms. The in-patients and out-patients numbered 1,311 and 52,221, respectively, against 1,386 and 50,543 in 1893-94, the daily average being 53.71 in-patients and 443 out-patients against 60 and 418.85 in the previous year. The average cost of diet per in-patient was about the same as last year, namely, one anna and nine pies. The total expenditure was Rs. 18,178 against Rs. 16,903 in 1893-94.

148. The dispensaries at Hazaribagh and Chatra are managed by the municipality, and those at Burhi and Giridih by local committees. A second grade Civil Hospital Assistant on Rs. 35 was in charge at Hazaribagh, except from 24th January to 16th May 1894, when a second grade Assistant Surgeon performed the duty. Rupees 1,218 represent both income and expenditure. One hundred and thirty-seven in-patients and 4,878 out-patients were treated against 155 and 4,123, respectively, in the previous year. Eleven major and 146 minor operations were performed during the year against 16 and 198 in 1893-94.

149. A local native doctor was in charge of the dispensary at Chatra throughout the year, who received Rs. 35 a month from municipal funds and Rs. 10 per month from Government for looking after police patients of four police-stations. The total income of the dispensary was Rs. 1,049 against Rs. 801 in 1893-94. During the year 22 in-patients and 4,426 out-patients were treated against 25 "in" and 4,182 "out" patients in the preceding year. The number of minor operations was 109 against 77 in 1893.

150. The Burhi dispensary was in charge of a local native doctor throughout the year, who was in receipt of a monthly salary of Rs. 30, half of which is contributed by Government. The total income amounted to Rs. 1,161 and the expenditure to Rs. 1,086. There were 2,137 out-patients against 1,791 in 1893-94. No indoor relief was given in the dispensary, but 76 minor operations were performed against 57 last year.

151. The dispensary at Giridih was in charge of the Assistant Surgeon in medical charge of the Giridih subdivision, who receives an allowance of Rs. 20 per mensem from the dispensary fund. The total income of the dispensary amounted to Rs. 1,747 and the total expenditure to Rs. 910. The number of out-patients treated was 7,479 against 6,057 in 1,893. No indoor



relief was given, neither have any arrangements yet been made for opening an indoor ward. One major and 174 minor operations were performed against one major and 130 minor operations in the previous year. Besides this dispensary, there are four other private dispensaries in and about the town of Giridih, three of which are maintained by the East Indian Railway Company, the Bengal Coal Company, and the Raniganj Coal Association for the benefit of their employes. The fourth, which is open to the public, is managed by the Scotch Mission at Pachamba. There is also another private dispensary at Hazaribagh which is supported by the Dublin Mission. It has a large highly-educated European staff, and affords a large amount of assistance, especially to the aboriginal and other low-caste inhabitants.

152. In Lohardaga the total income of the charitable dispensary at Ranchi was Rs. 2,523, the major portion (Rs. 2,048) of which was contributed by the local municipality, Rs. 401 by private subscriptions and endowments, and Rs. 74 by Government. Out of Rs. 74 contributed by Government, Rs. 54 were for the diet expenses of in-patients in police cases and Rs. 20 for registers and forms. The total expenditure was Rs. 2,523 against Rs. 2,611 in the previous year. One hundred and seventy-seven in-patients and 4,688 out-patients were treated against 175 and 5,122, respectively, in 1893-94. It was a healthy year in Ranchi, hence the decrease in the number of out-patients. The dispensary is in charge of an Assistant Surgeon on Rs. 100 a month, and is daily visited by the Civil Surgeon of the district. The salary which the Assistant Surgeon receives is beyond the means of the Municipality, and is very high compared with the salaries paid in Purulia and Hazaribagh, where the medical officers in charge receive Rs. 55 and Rs. 35, respectively. More money is required for roads, which are in a shameful state of disrepair, and I have called upon the Municipality to appoint an officer on a lower salary and to increase the expenditure on road-making.

153. The Lohardaga dispensary is in charge of a Civil Hospital Assistant. The income and expenditure amounted to Rs. 678, of which Rs. 214 was contributed from municipal funds, Rs. 186 from private sources, and Rs. 278 by Government. There was a decrease in the expenditure of Rs. 149 under the head of medicines. The out-patients numbered 2,209 against 1,646 in the previous year, the increase arising chiefly from the prevalence of malarial fevers. The subscriptions are still largely in arrears. The Municipal Commissioners have ceased to use the dispensary building as an office.

154. In Palaman the Daltonganj dispensary was in charge of the Civil Medical Officer there. The number of "in" and "out" patients treated in the dispensary was 177 and 4,306 against 155 and 4,442, respectively, in 1893. The number of major operations was 99 against 79 in the preceding year. The income of the dispensary amounted to Rs. 1,921 and the expenditure to Rs. 1,437. The financial condition of the institution is satisfactory, and a proposal to place it in charge of the local Municipality is under consideration. Lately Rai Bhagwat Doyal Singh Bahadur of Chainpur has made the munificent offer of Rs. 3,000 to build and endow a female ward, and this addition to the hospital will greatly increase its usefulness, as there is only one very small room at present for female patients. Thakurai Gobind Prosad Singh of Ranka has also offered to build a hospital at Ranka and to maintain it at his own expense up to Rs. 1,000 a year. This institution, if started, will be of the greatest possible benefit to the people of that part of the district which is notoriously fever-stricken.

155. In Manbhum the Purulia, Jhalda, and Raghunathpur dispensaries were maintained by the respective municipalities and the Barabazar dispensary by local subscriptions. The financial condition of this last-named dispensary is not satisfactory. Subscriptions are still largely in arrears. The defaulters have been addressed by the Deputy Commissioner to pay up their dues. Its abolition, however, will be severely felt, as this is the only institution of its kind in the south of the district. The Pandra and Jharra dispensaries are maintained respectively by the zamindars of those two parganas, the Topechanchi dispensary jointly by the zamindars of Katras and Nowagarh, and the Gobindpur dispensary by private subscriptions. The last two dispensaries are on the Grand Trunk road. The zamindar of Katras wanted to remove the Topechanchi dispensary to Katras, but this could not be permitted, as its

situation on the Grand Trunk road makes it a boon to travellers. The following statement gives statistics of the Manbhum dispensaries:—

DISTRICT.	NAME OF DISPENSARY.	INCOME FROM—					EXPENDITURE.	TOTAL NUMBER TREATED.			Daily average number of in-patients.	Daily average number of out-patients.	Cost of diet per in-patient.	REMARKS.
		Municipal grant.	District Board grant.	Government.	Private subscriptions, endowments, &c.	Total.		In-patients.	Out-patients.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Manbhum	Purulia	Rs. 1,651	Rs. 141	Rs. 166	Rs. 1,878	Rs. 1,878	Rs. 341	4,596	4,937	13'32	44'71	Rs. A. P.	0 1 6	
	Pandra	...	...	9	832	841	123	2,167	2,290	3'06	15'81	0 1 3		
	Gobindpur	...	...	8	440	448	107	2,613	2,720	4'43	16'54	0 1 4		
	Topechanchi	...	...	4	703	706	68	1,531	1,599	2'30	10'09	0 1 3		
	Raghunathpur	907	...	...	911	911	...	3,907	3,907	...	22'70	...		
	Jhalda	303	...	...	306	306	...	1,367	1,367	...	10'46	...		
	Jheria	...	...	...	...	...	...	...	...	...	...	...		
	Barabazar	...	...	4	886	890	38	2,379	2,417	2'37	11'07	0 1 4		
	...	...	...	410	479	889	765	...	1,399	1,399	...	10'54	...	
	Total	2,931	...	583	3,445	6,939	6,855	677	19,959	20,636	25'48	142'42	0 1 4	1'67

156. In Singhbhum 121 in and 2,139 out patients were treated in the Chaibassa dispensary against 95 and 1,855, respectively, in the previous year. The increase both in the outdoor and indoor patients was due to the excessive sickness and the prevalence of cholera during the year. Two major and 62 minor operations were performed in the dispensary. The total income during the year amounted to Rs. 1,938 and the expenditure to the same amount. Out of the total receipts Rs. 239-0-7 were paid by the Government.

157. The Lohardaga leper asylum is in charge of the Revd. O. Gemsky.

It provides home for (1) lepers, (2) untainted children of leprous or syphilitic parents, and (3) for other incurables. There are 23 inmates in the asylum for lepers in the beginning of the year, of whom four died and one left the asylum. Only three lepers asked for admission during the year, so there are 21 lepers in it at present. In the children's home there are now seven boys and six girls. The expenses of both the leper asylum and the children's home amounted to Rs. 1,790. In the asylum for other incurables there were 18 inmates in the beginning of the year, of whom two died and one left the asylum cured. Six persons got admission during the year. The total expenditure of the asylum for other incurables amounted to Rs. 714 during the year. This is an excellent institution and is doing much benevolent work.

The Purulia leper asylum is on a much larger scale and is also well managed and proving a most useful institution. There were 142 males and 107 females in the asylum during the year. Segregation of sex is strictly observed, and untainted boys and girls are kept apart from their parents and relations. Sufficient care is taken of all the inmates. The total expenditure of the institution was Rs. 12,850, out of which Rs. 100 were contributed by Government.

158. Mrs. Grimley is still the Honorary Secretary of the Committee for the Administration of the Marchioness of Dufferin's Fund and looks after the management generally.

Lady Dufferin's Fund.

In the Hazaribagh branch the services of Miss Shornalata Mitter, who has passed the Vernacular Licentiate examination at the Campbell Medical School, were entertained during the year. The probable income of the branch is about Rs. 85 per month, which is quite sufficient to cover present expenditure, the main items of which are (1) lady doctor's salary of Rs. 50 a month, and (2) house-rent allowed to her Rs. 12 per month. Until the financial prospects of the branch improve, and it is seen to what extent the inhabitants of the town and district appreciate the help afforded them, it has been decided not to spend money in constructing a hospital. Arrangements have therefore been made to rent a bungalow which is conveniently situated near the local dispensary. The lady doctor since her arrival in September 1894 has treated a considerable number of out-patients and has done much good by attending zana ladies at their homes, and is likely to become extremely useful and popular.



159. As in previous years, the Ranchi Committee entertained the services of a trained midwife and nurse on a monthly salary of Rs. 30 and a fixed house allowance of Rs. 3 per mensem. She was also allowed half the fees earned by her in attending cases of accouchement and sick-nursing. During the past year the Committee decided to construct a zanana hospital at Ranchi on the standard plan which was furnished to them by Government. The construction of the building has been completed since the close of the year. Suitable quarters have also been built for the accommodation of a lady doctor or nurse to be placed in charge of the hospital. The construction of the hospital and nurses' quarters has cost Rs. 4,002-14-2. Altogether 38 cases were attended by the midwife during the year, out of which 20 were cases of sick-nursing and 18 cases of labour. As in previous years the midwife discharged her duties ably and satisfactorily. The Palamau branch was started in the year 1890, but it is still regarded by the general public of that backward part of the country with apathy. The present midwife in Daltonganj joined her appointment in September 1893, and since then she is working well. During the year she attended 14 cases, out of which 2 were complex cases, and as remuneration for her labour she received a sum of Rs. 63.

## XXVIII.—LIBRARIES.

160. The district libraries are in good order. In Hazaribagh the classification of books into subjects was too much elaborated in certain cases, and I gave instructions for reduction in the number of subjects. In Lohardaga there are yet a number of useless books which might be sold as waste paper. There are two semi-public libraries in the town of Hazaribagh—one for the European and the other for the native residents of it. Both are supported by private subscriptions and donations. At Ranchi also there are also two similar libraries. The library for the European community here attached to their club contains a fair collection of books. The library for the native community has improved during the year of report, and 60 new and valuable books were purchased for it. The number of subscribers rose from 35 in 1893-94 to 52 in the year under report, and the amount of subscriptions from Rs. 171 to Rs. 182. At Daltonganj in Palamau a new reading club was established by the Bengali residents. There has been no addition to the number of books in the Purulia public library, and the proposal to purchase for it well-selected books from the donation paid by the zamindar of Jharia appears to have been shelved.

## XXIX.—MUSEUMS.

161. Nil.

## XXX.—LOCAL SELF-GOVERNMENT.

162. The Local Self-Government Act III (B.C.) of 1885 is not in force in this Division, nor are the people prepared for it. For the management of local affairs there exist Municipal, District Road and Education Committees at the head-quarters of each district and Branch Road Committees at Giridih and Gobindpur.

163. Municipalities exist in the head-quarters stations of all the districts, and there are other municipalities at Chatra, Lohardaga, Jhalda, and Raghunathpur. The elective system is in force only in Hazaribagh, Chatra, Ranchi, and Purulia. The Chairmen in every instance are appointed by Government. The following statement gives the population of the towns and the constitution of the municipal bodies :—

NAME OF MUNICIPALITY.	Population within municipal limits.	Date of establishment.	NUMBER OF COMMISSIONERS—			Officials.	Non-officials.	Europeans.	Natives.
			Nominated.	Elected.	Total.				
1	2	3	4	5	6	7	8	9	10
Hazaribagh	16,672	1st April 1880	5	10	15	4	11	5	10
Chatra	10,773	Ditto	5	10	15	3	13	...	15
Ranchi	20,306	Ditto	4	8	12	5	7	5	7
Lohardaga	7,110	1st July 1888	10	...	10	2	8	...	10
Daltonganj	5,195	Ditto	9	...	9	2	7	...	9
Purulia	12,128	20th July 1876	6	12	18	3	15	3	15
Jhalda	4,800	1st April 1888	9	...	9	...	9	...	9
Raghunathpur	6,216	Ditto	9	...	9	...	9	...	9
Chandabasa	6,850	1st April 1875	13	...	13	4	8	2	10
Total	90,150		60	40	100	23	87	15	94

The Ranchi Municipality is likely soon to have an accession of three to the number of its Commissioners. Jhalda and Raghunathpur have been shorn of their purely agricultural portions, but the curtailment of Lohardaga and Ranchi is still hanging fire.

164. The Deputy Sanitary Commissioner, Western Circle, inspected all the municipalities, except Chatra and Daltonganj, and his notes contained many valuable suggestions regarding sanitary improvements, and the Commissioners of these municipalities, except Ranchi and Lohardaga, have taken prompt measures to give effect to them in so far as the funds at their disposal permit. The matters to which attention was called in Ranchi were (1) the covering of drains and encroachment on roads, (2) the erection of private latrines fronting public highways, and (3) the removal of spill-water round wells, but very little has been done to remedy the defects although seven months have elapsed since they were pointed out, and very little will be done until the Deputy Commissioner, who is Chairman, takes the initiative in executive matters instead of leaving them to be dealt with by the Commissioners at a meeting, who, however excellent they may be as a consultative body, are, by natural habit and force of circumstances, slow to move in enforcing the penal clauses against their friends and neighbours. In Lohardaga there are many matters connected with sanitation which do not require the immediate outlay of municipal funds, in which improvement is urgently called for, and can be effected if the Municipal Commissioners are but alive to a proper sense of their duties. For instance, the Deputy Sanitary Commissioner's inspection note shows that there are many private well-prives in the town which are contaminating the water of wells used for drinking and other purposes, but proper steps have not yet been taken to fill them up. The Deputy Commissioner's attention has again been called to this matter.

165. My inspection of the Hazaribagh, Daltonganj, and Purulia Municipalities satisfied me that they are all well managed. The general condition of the roads in all of them, especially in Hazaribagh, was good. The roads in the Ranchi Municipality are much inferior to those of Hazaribagh and Purulia, and some of them appear to be utterly neglected. A new overseer has recently been appointed with an increased salary, and an improvement in their condition may now be looked for.

The Commissioners of the Jhalda Municipality are reported to take very little interest in their work, and the affairs of the Municipality are chiefly looked after by the Vice-Chairman, who is also the Rural Sub-Registrar of the place.

166. The following statement shows the constitution of the District Road Committees, the number of meetings held during the year and the average attendance at those meetings:—

NAME OF ROAD COMMITTEE.	NUMBER OF MEMBERS—			Number required to form quorum.	Number of meetings held.	Number of meetings in which there was no quorum.	Average attendance at meetings.
	Official.	Non-official.	Total.				
1	2	3	4	5	6	7	8
Hazaribagh ...	8	16	24	6	3	...	9.6
Lohardaga ...	4	8	12	3	7	...	4.0
Palamau ...	4	12	16	4	10	1	5.1
Manbhum ...	5	13	18	3	14	...	6.9
Singhbhum ...	4	8	12	3	9	...	5.7



In the majority of the District Boards nearly a third of the total number of members attended at each meeting, thus indicating that the majority—mostly non-officials and aliens—do not interest themselves in their work.

167. The Branch Road Committee at Giridih in Hazaribagh held four meetings, in two of which no quorum was obtained. The average attendance of members in these meetings was 3·75 against 3 in the preceding year. No meeting was held by the Branch Road Cess Committee at Gobindpur, as there were no funds placed in their hands for allotment. Mr. Morshead, the Officiating Deputy Commissioner, reports:—"The estimates are drawn up by the District Engineer here and passed by the Chairman of the District Road Committee. The Chairman of the Branch Committee appoints contractors to carry out the estimated works. After the contractor's work is checked and passed by the District Engineer the bills are passed by the Chairman and Vice-Chairman of the Branch Road Committee according to the amount of bills for payment."

168. Education Committees exist at the head-quarters station of each district, and are composed of official and non-official gentlemen, who, as a rule, evince a certain amount of interest in matters connected with local education.

#### XXXI.—EMPLOYMENT OF MUHAMMADANS.

169. The number of gazetted appointments in the Division carrying salaries exceeding Rs. 100 per mensem was 47, and the number of Muhammadans holding such appointments was two. The proportion therefore is much smaller than last year, when it was one in nine. There were four gazetted appointments with salaries of Rs. 100 and under, none of which were held by Muhammadans. The total number of ministerial appointments in the Division was 367, of which 36, or nearly 10 per cent., were held by Muhammadans. The total number of menial appointments was 497, of which 169, or 33 per cent., were held by Muhammadans. In the previous year the number of ministerial and menial appointments in the Division was 369 and 596, of which 36 and 185, respectively, were held by Muhammadans. The decrease in the total number of menial appointments held by Muhammadans is chiefly due to the amalgamation of the civil, criminal, and revenue process-serving establishments. The total number of appointments of all classes in the Division was 916, of which 212, or 23·1 per cent., have fallen to Muhammadans. The percentage of the total number of Muhammadans on the total population of the Division is only 5·9. My remarks last year regarding the difficulty in securing suitable Muhammadan candidates for employment are still applicable. Considering the proportion of educated Muhammadans to educated Hindus, the percentage (23·1) of appointments held by Muhammadans is fair. Most of the Muhammadans in the Division are low class men who do not care to educate their children for superior service.

#### XXXII.—POST OFFICE AND TELEGRAPH.

170. The opening of three new post offices in the Hazaribagh district increased the total number of offices from 27 to 30.  
 Post Office. The Imperial lines cover 198 miles, and the mails were carried with sufficient regularity, and there was no occasion to prosecute any one under the Post Office Act. In Lohardaga the number of Imperial post offices increased from 17 to 19, one by conversion of the Khunti zamindari dâk office, and the other by the creation of a new office at Ambatoli. There has been an acceleration of the Gobindpur mail, which is now despatched twice a day.

171. There has been no change in the number of telegraph offices which are to be found at the following places only in this Division:—Ranchi, Hazaribagh, Chaibassa, Purulia,  
 Telegraph.

and Gobindpur. The amount of business done is shown by the following figures:—

	Messages received.		Messages transmitted.	
	1893-94.	1894-95.	1893-94.	1894-95.
1	2	3	4	5
Ranchi ...	4,081	3,584	3,987	3,882
Hazaribagh ...	2,242	2,168	2,456	2,168
Purulia ...	3,138	4,150	2,884	3,667
Chaibassa ...	810	1,499	1,051	2,000

The Gobindpur figures have not been given. It appears from this that while the Ranchi and Hazaribagh transactions have declined, the business has materially increased in Purulia and Chaibassa, more especially in the latter place; and as there is a likelihood of the improvement continuing, the time seems to have come for converting the Chaibassa office from a third to a second class station. The decline in coolie recruiting will account for the decrease in Ranchi and Hazaribagh and for some of the increase in Purulia and Chaibassa.

### XXXIII.—ZAMINDARI DÁK, FAIRS, AND POUNDS.

172. The statistics of revenue and expenditure of the zamindari dák funds in the several districts are given in the following table:—

DISTRICT.	Demand.	Collection.	Remission.	Balance.	EXPENDITURE.		
					Cost of head-quarters establishment.	Cost of lines, dák office, &c.	Total.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Hazaribagh ...	7,559	7,385	...	174	302	6,251	6,553
Lohardaga ...	5,924	5,924	...	...	123	5,454	5,577
Palamau ...	5,915	4,705	34	1,176	147	6,177	6,324
Manbhum ...	7,706	7,706	...	...	299	6,507	6,806
Singhbhum ..	2,705	2,632	...	73	...	3,013	3,013
Total ...	29,809	28,352	34	1,423	871	27,402	28,273



The total demand of dák cess in the Division amounted to Rs. 29,809 in the past against Rs. 25,673 in the preceding year, the total collection to Rs. 28,352 against Rs. 24,654, and the total expenditure to Rs. 28,273 against Rs. 27,223. The increase mainly pertains to Palamau, where the assessment of the cess in 1893-94 was proportionately reduced under the provisions of section 10 of Act VIII (B.C.) of 1862, owing to the existence of a heavy surplus to the credit of the fund at the close of 1892-93. This accounts for the apparent increase in 1894-95. In three districts, Hazaribagh, Lohardaga, and Manbhum, the current demands have been fixed for five years with effect from the year 1893, while in other two, Palamau and Singhbhum, owing to special circumstances the assessments are made annually.

173. The following table shows the dák lines and offices maintained:—

DISTRICT.		Length of lines in miles maintained.	Number of dák offices maintained.
1		2	3
Hazaribagh	...	431	4
Lohardaga	...	377	8
Palamau	...	354	17
Manbhum	...	280	15
Singhbhum	...	168	5
Total	...	1,610	49

In Palamau two dák muharrirs were appointed during the year in place of the guru postmasters, who could not manage their work properly. The allowance of guru postmasters in this district was also raised during the year from Rs. 5 to Rs. 10 per mensem.

174. In Hazaribagh 22 fairs were held at different places during the year against 16 in the preceding year. In two of these, namely those at Hosir and Surujkund, the estimated average daily attendance of persons was 10,000. At four others, namely, Mirzaganj, Kisco, Chatra, and Burkuttu, the average ranged from 7,000 to 2,000. Of the rest in eight the average was 1,000 each. In the other eight it was less. All the fairs, however, with the exception of Chatra, were little more than market gatherings, and required no special sanitary arrangements. At Chatra, where the fair lasted nine days, temporary latrines were erected and sweepers employed at the expense of the zamindar, the Raja of Padma, under the supervision of the Police and the Municipal authorities. It is the great cattle fair in the district, and cattle from different parts of the province are brought to it for sale. At this fair the drinking water was obtained from wells and tanks. At others it was obtained from rivulets and streams. No disease in epidemic form broke out in any of the gatherings.

175. In Lohardaga the fair at Jagannathpur, at a distance of about six miles from Ranchi, was held as usual on the car festival day of the Hindus, and was attended by about 10,000 people. The principal articles brought for sale were brass and copper utensils, fancy articles, and sweetmeats.

176. In Palamau the usual fair was held at Daltonganj in February, and continued for about a month, but was not so well attended as in previous years, probably because it clashed with a large fair in the neighbouring district of Shahabad. The Daltonganj fair is a very useful institution, as it gives the

people of the district an opportunity of purchasing brass and other utensils and articles which are not obtainable at other times of the year. Sports were held at this fair and prizes given for vegetables, &c. The usual conservancy arrangements were made, and there was no outbreak of disease of any kind. The cattle fair at Harhanj in this district was held during the year in the usual way, and was also very largely attended.

177. In Manbhum there were no fairs worth the name. Some religious gatherings were held at different places at different times. The biggest amongst these were those held at Telkupi near the Damudar, Jhari-buri near Chirkunda, and Bero near Raghunathpur.

178. The annual *mêla* at Chaibassa in Singhbhum was, as usual, held in the month of December, and lasted 25 days. Shop-keepers came to it from the neighbouring districts, and the gathering was a fairly good one. The Government grant of Rs. 200 was spent on the construction of corrugated iron sheds at the *mêla* site. There was no outbreak of sickness here.

179. The following table gives the statistics of receipts and expenditure of pound funds in the several districts during the past two years:—

Pounds.

DISTRICT.	Receipts.		Expenditure.	
	1893-94.	1894-95.	1893-94.	1894-95.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Hazaribagh ...	3,525	3,549	1,010	846
Lohardaga ...	3,359	2,832	1,150	1,195
Palamau ...	5,047	5,097	630	1,041
Manbhum ...	3,262	2,897	72	118
Singhbhum ...	940	679	278	265
Total ...	16,133	14,060	3,140	3,501

180. In Hazaribagh one new pound was established during the year and an abolished pound re-opened. These, with the 28 pounds at the close of 1893-94, were at work during the year of report. Two of the pounds appertain to municipalities, and the figures given in the table above represent the receipts and expenditure in respect of 28 Government pounds, 17 of which were managed direct and 11 were farmed out. No demand in respect of any pound remained unrealised in this district, and no complaints were received against pound-keepers. In Lohardaga two new pounds were established during the year. Both of these were farmed out. The 22 pounds which were in existence in this district since the preceding year were managed khas.

181. In Palamau the number of pounds remained unchanged, and they were all held khas, except the Daltonganj municipal pound, which was farmed out by the Municipal Commissioners.

182. In Manbhum there were 35 pounds in the past against 36 in the preceding year. Three of these were municipal pounds. Five of the Government pounds were held khas and the rest farmed out. Most of the pounds here were inspected by the Deputy Commissioner and the Subdivisional Officer during their cold-weather tours.

183. In Singhbhum there were altogether 11 pounds at work against 8 during the preceding year. Six of these were managed direct, three were farmed out, one was under management of the Thakur of Kera and one was a municipal pound.



## XXXIV.—SOCIAL AND POLITICAL INSTITUTIONS AND PUBLIC FEELING.

184. The Kyasth Sabha at Hazaribagh, which is a branch of the Kyasth Sabha at Patna, held one sitting to elect delegates for the last Kyasth Conference at Benares. Several delegates were elected, but only one of them joined the Conference. The object with which the Society was first started a few years ago was the betterment of the condition of Kyasths generally by reforms in social matters; the curtailment of marriage expenses, which in these days of scarcity of husbands tells heavily on poor Kyasths, was a subject to which the Society specially addressed itself, but the results achieved fall very much below the end aimed at. The movement is one which must benefit all classes of the native community, as it would not be difficult to give instances of families taken from most ranks in life who have been ruined or reduced to great straits by lavish expenditure in connection with marriages. The recent circular of Government on the subject may in some measure advance the cause, but the real effort, however, must come from within, and it will be useless for Government officials to preach economy unless the influential leaders of Indian society in each district are prepared to take up the question spontaneously and to work heart and soul in setting an example to others who look to them for guidance. The Gorukshini Sabha at Hazaribagh displayed no activity during the year beyond maintaining a small pound at Ichak. In Palamau there is a Gorukshini Sabha at Hariharganj, but entirely unconnected with any political aim of any kind.

185. The Congress Committee at Hazaribagh, with its branches at Giridih, Ranchi, and Purulia, is the only political institution in the Division. The Committee held two meetings at Hazaribagh, and from it originated the memorial which was submitted to Government praying for the construction of a road from Ghutaria, the terminus of the Jharia Branch of the East Indian Railway, to Topechanchi on the Grand Trunk road. Four delegates to the Congress of 1894 were elected, but none attended. The Branch Congress Committee at Purulia held one meeting and sent a delegate to the Madras Congress.

186. Regarding the state of public feeling in Hazaribagh, Colonel Garbett writes:—"There is not very much to be said on the subject. Public opinion, as we understand it, does not exist in the district. The district is too much shut off and its people too ignorant and untutored to care for matters occurring outside their villages, which do not directly concern them. The above remarks do not of course apply to places like Giridih, Hazaribagh, and Chatra, where there are always a number of educated men, who take in newspapers and keep themselves acquainted with current topics, etc. Nothing occurred during the year under report to excite general interest or attention. The comparatively few who have to pay the income-tax dislike the measure, but the public generally know and care nothing about the matter. In a few places some petty discontent is occasionally expressed in connection with the Chaukidari Act V, not, however, because the assessments are oppressive, but because the grumblers have to pay something where they paid nothing before, and to pay punctually where before they paid irregularly or not at all according to their own sweet will. In the Government estates I found some mild discontent existing in connection with the village forests declared protected. These forests are all of very small area, and so the Government raiyats have hitherto had the freedom of them, and the restraints now imposed are felt to be irksome. When, however, the raiyats find that they can easily get all they reasonably require from the forests, and realise that the forests have really been protected in their own interests, they are certain to appreciate that measure. Some little excitement was caused in the course of the year amongst the Sonthals of Giridih subdivision owing to two of their number being convicted and punished for brewing pachwai for home consumption. A few score of them started to lay their grievances before the Subdivisional Officer, but returned from Pachamba after apparently interviewing the missionary at that place. A petition was subsequently put in by them praying to be allowed to brew pachwai for home consumption, and the matter has been reported for the orders of Government. Agitation in connection with kine-killing is practically non-existent. At Chatra, Ichak, Giridih,

Hazaribagh, and perhaps a few other places, a certain amount of interest seems to be still felt in cow protection, but the interest felt and evinced is fitful and spasmodic. The people generally have no thought about the matter, and would care nothing about it if left alone by outside agitators. As developed so far in the district, the movement is a kindly and perfectly innocent one, but of course it contains elements of danger and requires to be watched."

187. In the Lohardaga district the raiyats are still in the transition stage of endeavouring to free themselves from the shackles of feudal servitude to which their system of land tenure has long bound them; but though there has been no renewal of the agitation of 1890, it is not dead yet, but only dormant, while both landlords and tenants are awaiting the action of Government in the matter and may have a fresh revival at any time. Where the tension is great between the opposite parties, the raiyats deposit their rents in the treasury, but this procedure recently received an unexpected check owing to the action of the Deputy Commissioner in challenging on behalf of the zamindar their right to make the deposit. It became necessary to explain to him that neither he nor the zamindar was authorised to intervene at the time of deposit, and that the right of deposit was that of the tenant, and that so long as the latter made the declaration required by law, his deposit must be accepted. Cases of commutation have not been numerous, but in the few that have come before me I have generally restricted the services to those specified in the Commissioner's proclamation of 1890, though there is a tendency in the revenue courts to disregard the terms of the proclamation as not having legal sanction. Seeing, however, that the conclusions arrived at and set forth in the proclamation were the result of a careful examination of the conditions of service in Chota Nagpur and of case-law bearing on the subject by an officer specially deputed for the purpose, and that they were fully adopted by the Commissioner and acquiesced in by the Government, they seem to me to be entitled to as much weight as if they had been established after judicial enquiry, and this view I have given expression to in my decision on appeal. The *chanda* movement, which received a severe check last year, is not entirely extinguished, although there has been no trouble or agitation worth mentioning.

188. In Palamau in April 1894 at the *M* a very serious unlawful assembly took place in the southernmost part of the district. Misled by a false rumour that the Muhammadans of that part intended to sacrifice cows in the bazar, the Hindu jagirdars collected a large crowd, who came armed with guns to overawe the Muhammadans and to prevent cow sacrifice. Fortunately no actual breach of the peace occurred, but for nearly the whole of the day the village was in possession of the mob. A number of the ringleaders were convicted and bound down to keep the peace on heavy sums in addition to imprisonment. Referring to this incident Mr. Bright writes:—"This was a typical case in which the new section of the Police Act would have prevented undoubted hardship. Nearly all the inhabitants of that particular *dehat* are Christians, who had neither part nor lot in this quarrel. If it had been necessary to impose preventive police, as it would undoubtedly have been if a breach of the peace had occurred, it would have been very hard on the Christians to have had to pay for a matter with which they were in no way concerned."

In the early part of the year the curious ploughman begging movement spreading through Shahabad and Gaya rapidly passed into Palamau. There was a subsequent attempt to revive a similar movement and to get people to go to Gaya and Benares on pilgrimage, but it met with no response. The story of the movement is this:—All ploughmen were obliged to give their cattle three days' rest and go round the neighbouring villages begging. With the proceeds three wheaten cakes were prepared, one for the ploughman himself, one for his cattle, and the third to be buried under their stall.

189. In Manbhum the people do not interest themselves in public affairs, but the Manbazar and Begunkudar succession cases created some stir, especially the latter, in which the object of the suit was to establish the legitimacy of a child whom the revenue authorities had declared to be supposititious, the estate at the time being under the Court of Wards. In Mr. Windsor's opinion, not a fear, without foundation, the general feeling among the cultivating and labouring classes is a hatred and fear of the coolie recruiter.



190. In Singhbhum some anxiety was felt as to the light in which the Kols might regard the settlement operations, but they are evincing not the least opposition. Mr. Bompas is of opinion that on matters that do not concern the district, public opinion cannot be said to exist.

191. Speaking generally, the public feeling in Chota Nagpur is confined to a very small section of the people, viz., the educated few who are for the most part aliens to the country. The masses are very seldom affected by any thing which does not directly concern them, and are indifferent in matters of general interest. Their interests are centred in their fields, their cattle and their homes, and they do not love litigation for litigation's sake, but are naturally a contented race and wish to be let alone in the free enjoyment of their customary privileges; they will work cheerfully at the proper seasons for cultivation, but dearly delight in leisure, and the observance of holidays, feast, and festivals of all nations and creeds; they are no mean musicians in their simple way, and are devoted to dancing on the village play-ground; like the Irish peasantry they would cheerfully witness the extinction of the whole race of landlords and have no liking for middlemen of any kind, not even an *arkati*, but prefer direct dealings with a hakim who lends a willing ear to their grievances.

192. The only papers published in the Division are the *Dharwak* printed at the Pukhurea Mission in the Gobindpur sub-division of Manbhum, and the *Gharbandhu* printed by the German Lutheran Mission at Ranchi. Both of these papers have in view the religious and moral improvement of the Christian converts belonging to the two Missions.

#### XXXV.—SUBORDINATE EXECUTIVE ESTABLISHMENT AND CHARACTER OF OFFICERS.

193. There were five Sub-Deputy Collectors and two *kanungoes* employed in the Division. Of the former, two were employed in Hazaribagh, one in Lohardaga, one in Manbhum, and one in Singhbhum. Of the two Sub-Deputy Collectors in Hazaribagh, one was stationed at head-quarters and the other at Giridih, but both were transferred from the district at the beginning of the year, and the latter only was replaced by a Sub-Deputy Collector from the Gobindpur subdivision in Manbhum. In Lohardaga Babu Jadu Nath Chatterjee was employed as a Sub-Deputy Collector from 1st April to 11th May 1894, when he was promoted to a Deputy Collectorship. Babu Srish Chandra Mozumdar, the Sub-Deputy Collector of Singhbhum, was transferred to this district in January last and employed in trying criminal cases at head-quarters. In Manbhum the Sub-Deputy Collector was in charge of the sub-treasury at Gobindpur.

194. Of the two *kanungoes*, one was employed in Lohardaga, chiefly on surveys and measurements in connection with land acquisition work, in miscellaneous enquiries into cases arising out of land disputes and settlements, &c., in Government estates and in making enquiries into cases under the Land Improvement Loans Act, and the second was employed in Palamau on general duties, especially in connection with the Palamau Government estate. During the past year one of his principal duties consisted of the collection of rents from the *rai-yats* of certain villages, which were brought under *khas* management.

195. A statement showing the character of officers employed in the Division is annexed.

#### XXXVI.—CONDUCT OF ZAMINDARS.

196. The attitude of the zamindars generally is one of loyalty to Government and of good feeling towards the district officials. The chief zamindars in Hazaribagh are those of Dhunwar, Serampur, Gawan, Palganj, and Ramgurh. The zamindar of Dhunwar is a lunatic, and his property is under management of the Court of Wards. Gawan, Palganj, and Koonda are thoroughly loyal, and comply with orders and instructions promptly and cheerfully. The zamindar of Serampur omitted to attend, for some unaccountable reason, the *darbar* arranged to be held for the presentation of a *khillat* to him. The zamindar of Ramgurh, Rajah Ram Narain Singh, is difficult to move, and is not amenable to

reason. Considerable difficulty was experienced in getting him to make proper arrangements for the supply of *rasad* for troops moving through the district, and it was not until he received a peremptory warning from Colonel Garbett that he gave his manager, Mr. Bowman, a free hand in the matter. Even then he did as little as possible to assist his manager, and but for the latter's strenuous personal exertions, there would have been trouble. The Rajah, however, is not actuated by ill-feeling or disloyalty, but is old and in bad health, and weak and too ready to listen to bad advisers.

The zamindars in Lohardaga, with few exceptions, show no ability in managing their estates, but as a class are involved in debts, and even the benefits conferred by the special enactment, the Chota Nagpur Encumbered Estates Act, cannot help them in many instances in which they are found to be hopelessly insolvent.

In Palamau there was some ill-feeling stirred up by some designing *mahajans* between Rai Bhagawat Dayal Singh Bahadur of Chainpur and some of his raiyats, but after careful enquiry by Mr. Bright nothing was found to show that the Rai Bahadur was in any way to blame. The Rai Bahadur has made a gift of Rs. 3,000 for the establishment of a female ward for the dispensary at Daltonganj. Babu Kishen Bux Rai of Nawa-Jaipur is involved in debt. He has been attempting to set his affairs in order, and if a loan, for which he is negotiating, can be successfully raised, his estate should, in a few years, be once more free of embarrassment. The affairs of Babu Bisambhar Nath Sahi of Sonepur are reported to be going from bad to worse, and nothing but the appointment of an experienced and trustworthy manager can be of any avail. Thakurai Gobinda Prosad Singh of Ranka continued to maintain the middle English school at Ranka, paying all expenses beyond the Government grant. He has also offered to establish and maintain a dispensary at Ranka. The native zamindars in Manbhum are, with a few exceptions, involved in debt. They are reported to be going on tolerably well with their raiyats. The zamindar of Jaipur is said to be inclined to be oppressive. The Jharra zamindar came into the possession of a fine property a year ago, but by extravagant expenditure and foolish coal settlements he is trying hard to reduce himself to pauperism. The proprietor of the Pandra half estate, which was under protection of the Chota Nagpur Encumbered Estates Act, has got his estate released by paying off the balance of his debts. Babu Bunwari Lal Singh, zamindar of Nowagurh, managed his affairs personally and with tact. The relations between the zamindar of Tundi and his eldest son are unsatisfactory. The second son who lives with the father stands in the way of reconciliation. The affairs of the Pachete Raj are in a chaotic state of confusion. It has lately been decided to bring it under the protection of the Chota Nagpur Encumbered Estates Act. Regarding Messrs. Watson and Company, the patnidars of Barrabhum, Mr. Windsor has recorded the following remarks:—"Messrs. Watson and Company and the ghatwals are of course still a trouble. The Barrabhum compromise, which was intended to bring peace on the earth, has instead brought a sword. It has assisted Messrs. Watson and Company in their policy of aggrandisement and made the ghatwals believe that Government is their enemy and is in league with the patnidars. Mr. H. Mathewson (the present manager of Messrs. Watson and Company), though naturally he insists on the rights which the compromise gave him, is not unjust or oppressive in his methods, and of course he is not responsible for the state of things that exist in Barrabhum. Indigo has been given up and disputes between the Company and its non-ghatwal tenants are partially brought to an end thereby." In Singhbhum the only revenue-paying estate, Dhalbhum, is under management of the revenue authorities under the Encumbered Estates Act. The Thakurs of Kera and Anandpur and Babu Jugmohan Singh of Bandgaon have conducted themselves to my satisfaction.

#### XXXVII.—GENERAL REMARKS.

197. The history of Chota Nagpur and its people must ever be a fascinating subject to those engaged in its administration, though it has failed to attract much public interest except in connection with events of a stirring nature. The Kol rebellion of 1833, when the aboriginal inhabitants attempted

to shake off the yoke of the immigrant Hindus who had encroached on their possessions, the revolt of the native troops in 1857 at Ranchi, Purulia, and Chaibassa, accompanied by the plundering of the district treasuries, and carrying in its train the downfall of the Porahat Raja and other families of importance, the scenes of anarchy and spoliation that ensued as the mutineers spread themselves over the country gathering recruits as they went, the retribution that awaited them when the rebels to the number of 3,000 were completely routed by a small body of Sikhs, the periods of unrest among the Kols during a succession of years in the latter part of the present century culminating in the agitation in 1890, the successive outbreaks and resistance of authority committed by the Korwas, a predatory semi-savage tribe of hill robbers, in 1878 and 1883, repeated with varying atrocities in 1889 and 1893, the Koirā rebellion against the Bonai succession in 1878, the excitement among the Gohandahs of Kharsawan, and the disturbance committed by the Gond Chiefs and their adherents in 1889, all these stirring events, with their episodes of treachery, tenacity of purpose, heroism and devotion, may possibly have awakened for the moment some interest in the outer world, but it was evanescent, and the incidents and those who stayed their force are but little remembered. The recent appearance, however, of a remarkable work by Mr. J. F. Hewitt, a former Commissioner of Chota Nagpur, entitled "The Ruling Races of Pre-historic India," may perhaps serve to break the spell and to direct public attention once more to this interesting country. By a study of the local customs, social laws and institutions, religious, ritual and mythic stories and other relics of vanished races, the author traces all forms of national government to the primeval village communities of the forest races of Southern India, and shows that it was emigrants from thence who carried their rules with them as they advanced, and he gives an account of the primitive village, its origin, its development into the city, the province and the state, its methods of record for ensuring the permanency of the national traditions, and the preservation of their laws and customs. We are taught by his researches that Chota Nagpur is the home of a system of village organisation which was introduced by the Kolarian and Dravidian tribes who entered the country long before Aryan invaders, to whom the foundation of village communities is popularly ascribed. The organisation is still maintained almost intact in that portion of the Lohardaga district known as the Five Parganas, but in others the old institutions have been more or less wiped out. A variety of tenures exist, *bhuinhari*, *khunkati*, *puttidari*, *talukdari*, and *zamindari*, the origin and cause of which can be clearly traced to ancient times, and the study of them must serve to throw a flood of light on the revenue system of the country which may be said to have been founded and consolidated by the early Dravidians. It is therefore to Chota Nagpur, the nursing ground of these organisations, that we may look for materials and assistance when seeking to investigate the origin and growth of the land tenures connected with the system of revenue administration pertaining to the rest of Bengal.

198. It was remarked in the official review of the work of this Division last year that my report did not contain many suggestions for administrative reform, and in explanation of this circumstance it may be said that I have hitherto not regarded the pages of an annual report as the proper place for propounding such measures. However, I have never hesitated to introduce or suggest reforms which appeared to be beneficial to the country, or to oppose them when they have seemed unsuited to the primitive people with whom we have to deal, and that some progress has been made on the administration and development of this backward territory was clearly demonstrated in the report of the last year. The following are some of the many important matters that have engaged my attention during the past year:—The jagirdari question in Palamau, regarding which a special report was submitted, which awaits the orders of Government; the amalgamation of the process-serving establishments; the preparation of rules for the management of protected forests, as well as rules for the administration of the Forest Department; the improvement of the system of collections under the Rural Police Act; the commutation of ghatwali tenures and the management of ghatwali jungles in the Maubhum district; the protection of the great Pachete estate; the acquisition of land around jails for cultivating cereals; the amendment of the



Revenue Sale Law and the Public Demands Recovery Act; the survey and settlement of the Palamau and Kolhan Government estates; the re-arrangement of police-stations, and it may be said that nearly all of these subjects involve proposals for introducing reforms of a far-reaching nature into the administration.

199. I am happy to be able to record that the Chota Nagpur Mounted Rifles under my command has made a still further distinct advance both in strength and efficiency. The increase has been from one on the 31st March 1892 to 35 on the same date in 1893, to 55 in 1894, while the present strength is 85, not including honorary members. The experiment of holding a camp of exercise was made in February last, when there was a large muster of volunteers at Ranchi, many coming from the distant districts of Palamau, Hazaribagh, Manbhum, and Singhbhum, and others from more remote places in the Native States. The programme consisted of drill, parades, skirmishing manœuvres and a rifle meeting, at which the valuable cups and prizes offered were competed for with great keenness. The inspection by General Lance, which terminated the proceedings, included the execution by the Volunteer Corps of field operations in the open country in combination with the men and officers of the 11th Bengal Infantry stationed at Doranda which were carried out in a very effective manner.

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# RESOLUTION ON THE REPORT OF THE BOARD OF REVENUE ON WARDS' AND ATTACHED ESTATES IN THE LOWER PROVINCES FOR THE YEAR 1894-95.

REVENUE DEPARTMENT—LAND REVENUE.

Calcutta, the 26th October 1895.

RESOLUTION—No. 4675.

READ—

Report of the Board of Revenue on the Wards' and Attached Estates in the Lower Provinces for the year 1894-95.

The Board submitted their report with commendable punctuality on the 31st of August.

There were 74 wards' estates and 72 attached estates under the management of the Court of Wards during the year under report, against 78 and 67 respectively in the previous year, the number of wards' estates showing a decrease of four and the attached estates an increase of five. Of the total number of estates, 9 wards' and 13 attached and encumbered estates were under management for part of the year only, having been taken charge or relinquished during the year. Besides these, the ward's estate of Latifa-khatoon in Chittagong was released on the last day of the year. As requested by Government last year, the Board have shown estates which were under management for part of the year only separately from others in the statements relating to management charges and to the debts due by the estates. They have also distinguished by italics estates under management for part of the year only in Appendix I.

The Lieutenant-Governor desires that, in order to judge of the success of Government management, the two classes of estates may be also separated in future in the statements corresponding to those given in paragraphs 6, 7, and 9 of this year's report.

2. The total amount due to Government from estates under management Revenue and cesses due to on account of revenue and cesses, both arrear Government and current, was Rs. 49,93,261. Of this sum, Rs. 49,85,574 was paid, Rs. 39,724 being on account of arrears and Rs. 49,45,850, or 99·8 per cent. on the current demand, being due for current payments. The outstanding balance was reduced to Rs. 7,627, and of this nearly Rs. 4,000 were actually paid before the close of the year, but not adjusted. In the estate Barutter Hingly, in Midnapore, which alone owed any considerable sum to Government, the default was due to the bad harvests of two successive years having prevented the realization of the rents.

3. The sum of Rs. 5,65,842 was due to superior landlords, Rs. 1,63,534 being arrears from the previous year. Of this sum, Rs. 4,26,577 were paid and Rs. 671 remitted, leaving a balance of Rs. 1,38,594. This apparently bad result was due to the default of three estates named in the margin, all of which were in arrears also in the previous year. The two last-named estates were taken over heavily involved in 1893, and there were no funds to pay these debts. In the case of Satkhira the payment of the greater portion is awaiting the settlement of accounts with some of the landlords, which, it is hoped, will be completed during the current year.

4. The following statement shows the demand, collection, and balances due to the estates during the five years ending 1894-95:—

YEAR.	DEMAND.			COLLECTIONS.			PERCENTAGE OF—		Remissions.	Balances.
	Arrear.	Current.	Total.	Arrear.	Current.	Total.	Current collection on current demand.	Total collections on current demand.		
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.
1890-91	70,41,432	98,29,588	1,78,11,020	...	...	96,29,082	.....	98·	7,57,403	74,51,635
1891-92	77,07,017	91,53,100	1,68,60,117	30,69,305	60,00,571	91,58,736	66·3	99·8	12,12,170	65,69,599
1892-93	62,03,663	92,00,637	1,54,04,300	29,04,156	61,06,739	91,00,895	66·6	97·8	3,06,085	61,95,710
1893-94	66,78,027	97,32,203	1,64,10,230	29,84,402	64,12,911	93,97,313	65·8	96·5	4,30,740	63,77,177
1894-95	66,50,096	92,85,008	1,59,35,108	29,83,914	61,69,326	91,53,240	66·4	96·5	5,07,884	61,13,979

It is unsatisfactory to note that in none of these five years have the total collections (current and arrear) equalled the amount of the current demand; so that, were it not for remissions, arrears must have gone on accumulating during the whole period. During the year under report the percentage on the current demand both of current collections and of total collections was better than in the previous year, but there is still room for improvement. In Orissa only was the standard fixed by Government, namely, 90 per cent. on the current demand, attained; the results were worst in the Presidency Division, where less than half the current demand was collected.

5. The percentage of collections of the total demand (current and arrear) was highest in the three following estates:—Kanika 93; Rajkrishna Banerjee 92·5, Magun Das Rai 89. The following showed the worst results:—Paigamberpur (16·1), Dhalbhum (29·6), Chandra Kumar (30·1), Kasimbazar (35·3), and Sathkira (37·5). Out of the total balance of 61 lakhs of rupees, 46½ lakhs are said to be good and in process of recovery, and the rest is doubtful or irrecoverable.

6. As directed in the Resolution on last year's report, the figures for estates which were under the management of the Court for the entire year have been shown in paragraph 10 separately from those relating to estates which were managed by the Court for a part of the year only in the statement, which sets forth the result of the operations of the year on the debts due by the estates. The former class of estates owed at the commencement of the year under report Rs. 31,70,500, and incurred during the year further debts amounting to Rs. 3,12,874, so that their liabilities for the whole year amounted to Rs. 34,83,374. Of this sum, Rs. 6,82,860 were paid off during the year, and a further reduction of Rs. 86,123 was made by compromise, so that at the close of the year the aggregate debts had been reduced to Rs. 27,14,391.

7. In estates which were under the Court of Wards for the whole year, the cost of management proper averaged 7·9 per cent. on the current rent and cess demand. In the Burdwan Division it was 3·8 per cent. only, owing to the low cost in the Raj estate. In Orissa the cost was highest, viz., 16 per cent.; this is ascribed to the payment of Rs. 12,367 to the *mustajirs* or farmers in the Kanika estate for arrears of commission on collections made by them in previous years.

The amount payable on account of the general management rate leviable under Act X of 1892 was Rs. 1,44,785, besides arrears from 1893-94 amounting to Rs. 17,715. Of this, Rs. 1,35,515 was realized, leaving a balance of Rs. 26,985. In 1893-94 the amount payable was Rs. 1,37,401 besides arrears of Rs. 5,560, and the amount actually collected was Rs. 1,32,092. The Board should have compared the amount payable and realized now under Act X of 1892 with the figure before the passing of the Act. Under the rules framed under the Act, the rate is payable half-yearly in advance. The Board have drawn the attention of local officers to this rule, and it is to be hoped that there will be no arrears in future years.

The demand for the audit rate of estates with a rent and cess roll of Rs. 50,000 and upwards amounted to Rs. 25,652, of which Rs. 17,120 was for the current year. Of this sum, only Rs. 12,072 was realized, leaving a balance of Rs. 13,580. Of the 24 estates whose gross rent and cess demand amounted to Rs. 50,000 or more, it appears that the accounts of 19 only were audited. No reason is given to explain why five estates were passed over.

8. The total expenditure on survey and settlement in wards' estates amounted to Rs. 1,64,705, of which Rs. 1,24,652 were for the larger operations under the charge of the Director of Land Records. Final reports have been submitted for the operations on the Talipabad, Kujang, and Kanika estates, and that for Dakhin Saahbazpur is expected shortly. The work in the Sarail estate has been completed, but errors have been found in the record, which is therefore being revised. Survey and settlement operations were in progress at the close of the year in the Burdwan khas mahals, in Tikari, and the Srirampur estate. Operations on a small scale—mostly under section 101 or 103 of the



Bengal Tenancy Act—were in progress in ten other estates. The wards' estates situated in Chittagong, Cuttack, Balasore, Puri, Saran, Champaran, Muzaffarpur, and Darbhanga will be dealt with in the course of the general operations in those districts.

9. The following statement shows the expenditure under the various heads of improvements during the last five years:—

YEAR.	Subscriptions and donations to schools.	Subscriptions and donations to dispensaries.	Maintenance in efficient condition of estates, buildings and other immoveable property.	Improvement of land and property for benefit of ward.	Surveys and settlements.	Total.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1890-91 ... ..	59,241	32,255	2,13,178	58,404	1,26,523	4,89,601
1891-92 ... ..	61,155	37,598	1,91,397	92,864	2,67,345	6,50,359
1892-93 ... ..	64,059	36,524	2,16,870	1,57,782	97,104	5,72,339
1893-94 ... ..	59,844	46,527	2,46,225	1,58,406	2,01,899	7,12,901
1894-95 ... ..	50,217	38,564	1,68,808	1,43,208	1,64,705	5,65,502

The expenditure has fallen off under every head. The Board's explanation is as follows:—

"There has been a decrease of expenditure under all the headings, the decrease under the first four headings appearing especially in the Rajshahi Division on account of the release of the Dighapattas estates. There is also a marked decrease in the expenditure for the maintenance of buildings in the Burdwan and Chota Nagpur Divisions. In the former Division the Burdwan estates spent Rs. 64,360 on buildings, against Rs. 1,23,963 in the preceding year. In the Chota Nagpur Division the decrease is due to the release of the Jheria estate, which spent Rs. 15,373 in the previous year on the construction of a dwelling-house for the proprietor."

The large expenditure in the Burdwan estate during both years is for the construction of the Raj office building at Burdwan, which was completed during the year under report. The percentage of the total expenditure under the head of improvements on the net annual income (column 10 of Appendix II) was 15·06 in 1894-95 against 18·51 in the previous year. The most unsatisfactory feature in the statement given above is the decrease which is shown in the expenditure on improvements (column 5) in the stricter sense of the word, that is to say, in improvements to the estate of a remunerative nature. It is shown to be Rs. 1,43,208, or 3 per cent. on the annual net income of the estates, against Rs. 1,58,406, or 4·11 per cent., in the preceding year. The Board write—

"The expenditure of Rs. 1,43,208 is not so inconsiderable as it would appear at first sight, for it represents more than 10 per cent. of the surplus profits of the year."

But the Lieutenant-Governor would point out that it is considerably less than the sum invested (Rs. 2,01,171), and sinks into insignificance compared with the cash balance at the close of the year (Rs. 15,25,785). The Board in November 1894 drew the attention of local officers to the Lieutenant-Governor's remarks in last year's Resolution on the necessity of larger expenditure on improvements of this nature, and called for a programme from each estate of the works to be executed during the next three years. The programmes had been received from all districts except Gaya at the time of the submission of the Board's report. Sir Charles Elliott is glad to hear that action is being taken in the right direction, and hopes that his oft-repeated injunctions are at last to produce some result.

10. The following statement illustrates the working of the certificate procedure during the year under report and four preceding years in estates under management:—

Division.	Number pending from last year.	Number filed during the year.	Total.	Disposed of during the year.	Pending more than six months.	Pending less than six months.	Total.	Amount of demand covered by the certificates.	Total amount realized by certificates.
1	2	3	4	5	6	7	8	9	10
Burdwan ... ..	4,706	1,974	6,682	3,627	1,788	1,017	2,765	Rs. 1,91,075	Rs. 40,012
Presidency ... ..	1,522	982	2,504	1,558	467	451	944	87,085	47,094
Rajshahi ... ..	194	1,150	1,344	828	176	340	516	19,883	8,559
Jaeca ... ..	140	482	631	377	9	245	254	4,882	17,711
Chittagong ... ..	650	1,706	2,355	1,910	186	269	455	56,108	38,278
Patna ... ..	62	327	389	355	14	30	34	68,636	7,427
Bhagalpur ... ..	118	289	347	210	104	34	137	6,240	4,566
Orissa ... ..	82	235	317	271	30	16	46	6,680	3,672
Chota Nagpur ... ..	810	876	1,686	853	202	140	342	50,261	24,807
1894-95 ... ..	7,913	7,961	15,774	10,287	2,355	2,539	5,497	5,24,702	1,02,711
1893-94 ... ..	10,291	7,477	17,738	11,663	4,334	1,701	6,095	6,71,210	2,17,706
1892-93 ... ..	13,210	8,648	21,858	11,765	9,663	1,940	10,063	8,58,414	3,41,256
1891-92 ... ..	13,704	13,289	27,003	17,149	8,107	1,748	9,855	4,75,663	...
1890-91 ... ..	21,107	10,976	39,142	18,438	12,193	1,511	13,701	4,60,970	...

The number of certificates filed has increased, while the demand covered by them has decreased. The reduction in the number of certificates pending at the close of the year under report from 7,813 to 5,487 is satisfactory.

11. As requested in last year's Resolution, the Board have shown in a new Appendix (IV) the figures relating to civil suits filed in estates where the certificate procedure cannot be adopted.

The following are the figures for the year in regard to civil suits:—

Number of estates in which civil suits were instituted for the recovery of rents and cesses due to them.	Number of suits pending from last year.	Number filed during the year.	Total.	Disposed of during the year.	Pending more than six months.	Pending less than six months.	Total.	Amount of demand covered by the suits.
1	2	3	4	5	6	7	8	9
Fifty estates ... ..	309	2,564	2,873	2,425	235	213	448	Rs. 3,64,448

In future the statement should show in two additional columns the amount decreed and the amount recovered, so that the success of this procedure may be compared with that under the certificate law.

12. In Part II of the Report is given a short history of the management of each estate with a rent-roll of half a lakh or upwards during the year 1894-95. The great estate of the Burdwan Raj, with its rental of over 45 lakhs, was well and economically managed by Raja Ban Behari Kapur. The percentage of the management charges on the current demand was only 3·5, and of the cost of maintaining the proprietor and his family 9·26. In Tikari and Kasimbazar, the two next largest estates under the Court of Wards, the management charges were high, amounting to 16·1 and 16·7 per cent., respectively, on the current demand. The amounts spent on the proprietors was also high in both cases, being 16·72 in the Tikari estate and 18·5 in Kasimbazar. In the former estate Rs. 33,219 were spent on improvements chiefly for village irrigation.

The Lieutenant-Governor would take this opportunity to draw the Board's attention to the remarks which he made in August 1894 at the time of his

inspection tour in Noakhali in regard to the Courjon and other estates in that district. His Honour then pointed out that it was the duty of the Court of Wards to conduct the management for the good of the estate, and not to screw every rupee out of the raiyats for the good of the disqualified proprietor. He drew attention to the fact that nothing had been spent on improvements, and that no list of improvements had been prepared; finally, that the ward in one case had been allowed to raise a loan of Rs. 25,000, the repayment of which would leave no surplus for improvements for years to come.

Speaking generally of the management of the larger estates, the Lieutenant-Governor would remark on the high rate paid for management, the large sums paid to the proprietors, the great cash balances, and the comparative smallness of the sum spent on improvements.

13. In Part III of the Report an account is given of "estates taken in charge or released during the year." But this heading is misleading, as the list includes nine estates which were taken in charge or released during 1893-94, but which could not be mentioned in the report for that year, and on the other hand contains no mention of certain other estates which were taken in charge during 1894-95, too late to be embodied in this report. It would be convenient if, in future, estates belonging to different years could be more clearly distinguished and separated from each other.

No large estates were taken over by the Court of Wards during 1894-95. Among the estates released, there was no case of signally successful management, while there were many failures. The administration of the released estates in Midnapore appears to have been particularly unsuccessful. The cases of Basudebpur (released on 20th March 1894), Beraberia, and Belki appear to justify fully the remarks of Mr. Romesh Chandra Dutt, which are quoted from the Burdwan Administration Report for 1894-95, as follows:—

"For some years past our administration of several estates brought under the Court of Wards in Midnapore district has not been as successful as it ought to be, and several estates have been released in a very involved or in a hopelessly insolvent condition. The administration of the year under report is not a bright exception to this rule."

No doubt nothing could have saved the three estates named above from ruin, but if this was so, the Court of Wards should not have undertaken a task destined only to bring discredit upon Government.

14. The number of estates managed under the Chota Nagpur Encumbered Estates Act, VI of 1876, was 58, as against 55 in 1893-94. Six estates were released during the year and five were brought under the Act. The following statement shows the demands, collections and balances for 1894-95:—

District.	Arrear demand.	Current demand.	Collections.	Percentage of collections on current demand.	Remissions.	Balances.	Advance collections on account of ensuing year.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
Hazaribagh ...	29,671	1,00,472	95,438	94.9	6,358	26,347	34,271
Lohardaga ...	58,107	94,464	91,526	96.8	2,166	58,879	168
Palamau ...	2,730	16,073	14,881	92.6	286	3,636	.....
Manbhum ...	41,234	97,964	92,965	94.8	3,340	42,893	18
Singbhum ...	1,82,216	87,301	82,418	94.4	3,512	1,83,687	49
Total ...	3,13,958	3,96,274	3,77,228	95.1	15,662	3,17,342	34,601

In the statement showing the extent to which debts due by the estate have been liquidated, the Board have, as requested in the Resolution on last year's report, added a column to show what portion of the total debts fell due



within the year under the scheme of repayment prepared when each estate was taken in charge. The statement is reproduced below:—

Districts.	Due at the commencement of the year.	Ascertained and incurred during the year.	Total.	Payments.	Reductions by compromise.	Balance due at the close of the year.	Total amount provided in the scheme for payment of debts, as shown in the Commissioner's annual report.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Hazaribagh ... ..	4,21,481	2,67,832	6,89,313	44,725	8,624	6,36,264	46,041
Lohardaga ... ..	2,54,023	54,071	3,12,094	32,923	26,193	2,60,979	44,219
Palamau ... ..	7,12,954	2,617	1,14,971	6,733	.....	1,07,936	11,717
Manbhum ... ..	1,98,870	12,812	2,11,182	49,953	2,900	1,84,529	28,398
Singbhum ... ..	1,62,740	5,146	1,67,886	22,384	.....	1,36,602	30,606
Total for { 1894-95	11,53,068	3,42,478	14,95,546	1,66,618	39,616	12,89,312	1,63,241
{ 1893-94	12,94,012	67,066	14,51,067	3,47,240	11,861	10,91,966	.....

The comparison of columns 5 and 8 is satisfactory, that is to say, the schemes for the repayment of debts have as a whole been more than worked up to. There was a deficiency in payments by some estates which is more than counterbalanced by excess payments in others. The deficiency is most

Estate.	Deficiency.
1	2
	Rs.
Doranda ...	11,260
Siri ...	26,764
Tundi ...	4,944
Dhalbhum ...	12,684

noticeable in the marginally-noted estates. In Doranda it is due partly to the non-realization of anticipated increments in the rental of the estate owing to revisions of settlements, and partly to short collections. In Siri it is owing to the failure to sell a portion of the estate as had been contemplated. In Tundi a portion of the deficiency should have been paid during the year, as the estate had a cash balance of Rs. 2,322. In Dhalbhum the non-payment was due solely to delay on the part of the

creditors in accepting payment.

15. The Lieutenant-Governor desires to acknowledge the careful supervision exercised by the Board of Revenue over the several classes of estates in their charge. The names of the officers mentioned by the Board for successful management will, with one exception, be communicated to the Appointment Department.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Secretary to the Government of Bengal.

**RESOLUTION ON THE ADMINISTRATION REPORT OF THE  
COMMISSIONERS OF THE PORT OF CALCUTTA  
FOR THE YEAR 1894-95.**

No. 2140 Marine.

GOVERNMENT OF BENGAL—MARINE DEPARTMENT.

*Dated Calcutta, the 25th October 1895.*

**RESOLUTION.**

READ—

The Administration Report of the Commissioners of the Port of Calcutta for the year 1894-95.

The consolidated debt due to the Government, which at the beginning of the year stood at Rs. 36,91,575, was reduced by Rs. 1,61,815, and a further sum of Rs. 1,29,500 was invested in their own debentures. The nett balance of debt of the Commissioners on the 31st March 1895 amounted, exclusive of that incurred on account of the construction of the Kidderpore Docks, to Rs. 99,90,760, and the total investments at credit of the sinking fund have increased from Rs. 11,74,500 at the beginning to Rs. 13,04,000 at the close of the year.

2. Against this debt, the Commissioners hold block to the value of Rs. 2,09,20,813 and reserve funds amounting to Rs. 22,82,352 in addition to the valuable Strand Bank lands extending from Chandpal Ghât to Aheereetollah, for which an annual rent of Rs. 37,292 is payable to the Government.

3. An addition to the block of Rs. 4,20,944 was made during the year, the chief items being an extension of shed accommodation in the Petroleum Wharf at Budge-Budge and a new dredger. On the other hand, Rs. 1,64,205 was written off, of which Rs. 1,09,095 was the value of two hopper barges sunk on the 8th September 1894.

4. The work of widening the Howrah foreshore road, which was commenced during the year 1893-94, was completed during the year under review, with the exception of the demarcating fence, a fourth of which only has been completed.

5. The total amount received from the Government on account of the Dock loan up to the close of 1894-95 is Rs. 2,87,70,566. Against this advance the expenditure has amounted to Rs. 2,87,65,232, of which Rs. 25,258 were spent during the year.

The Docks were completed during the year. On receipt of the final report, the Secretary to this Government, in the Marine Department, in company with the Vice-Chairman of the Port Commissioners, inspected the works, and found them to be in every respect complete and in thorough working order. At the time of inspection all the 12 berths were taken up by vessels.

6. In regard to the revenue account, the year opened with a balance of Rs. 4,42,413, and the income for 1894-95 amounted to Rs. 43,46,583. The expenditure, including sinking fund, renewals and improvements, amounted to Rs. 40,93,370, leaving a balance of Rs. 6,95,626. The income of the year exceeded the budget estimate by Rs. 95,218, and in place of a deficit of Rs. 31,091, as was estimated, there was a surplus of Rs. 2,53,213.

7. The income under the head "Jetties" amounted to Rs. 13,05,435, showing a decrease of Rs. 32,956, as compared with that of last year. The total receipts from imports amounted to Rs. 8,36,658, which is Rs. 3,656 in excess of those for 1893-94. The receipts from exports amounted to Rs. 1,41,972, or Rs. 8,088 in excess of those of the previous year, and are the largest since the formation of the Trust. The expenditure amounted to Rs. 8,38,605.

8. The income derived from the Petroleum Wharf at Budge-Budge shows a decrease of Rs. 35,556, the total receipts for the year having amounted to Rs. 1,98,527. The quantity of kerosine oil imported was 25,120,773 gallons, against an import of 49,203,905 gallons during the previous year.

9. The importation of oil from Russia, which was  $16\frac{1}{2}$  per cent. of the total importations for 1893-94, rose during the year under review to 40 per cent. of the total imported.

10. Although the imports of case oil during 1894-95 were only 59 per cent. of those of the previous year, the excessive importation during 1893-94 caused the stock to accumulate at Budge-Budge to such an extent that the shed accommodation proved insufficient to hold all the oil landed. To meet this increased demand for storage, the sheds, which accommodated 12 lakhs of cases were enlarged and raised during 1894-95, so as to increase their utmost capacity to 20 lakhs, but this also proving insufficient, new sheds are being erected, which will shortly raise the accommodation to a total of 30 lakhs.

11. The total number of packages of tea, which passed through the Tea Warehouse, amounted to 664,587 chests, against 637,084 chests during the previous year. The receipts amounted to Rs. 1,20,843, against Rs. 1,16,236 during the previous year.

12. During the year 216 vessels with an aggregate tonnage of 510,991 were berthed at the Jetties, against 217 with a tonnage of 515,477 during 1893-94. The average number of days each vessel occupied the Jetties was 10·4.

13. The income of the Harbour Master's Department amounted to Rs. 5,30,303, against Rs. 6,47,281 in 1893-94. The decrease was chiefly due to a falling off in mooring hire and Harbour Master's earnings. The expenditure amounted to Rs. 5,64,419.

14. During the year there were 25 casualties to vessels, against 16 in the preceding year. This gives a percentage of 2·43, calculated on the number of vessels which arrived in the port.

15. In accordance with the orders of the Government, every casualty, which occurred during the year, was duly reported, and the Deputy Conservator held the preliminary enquiry required by section 6 of the Indian Merchant Shipping Act, 1883. The results of the enquiries were reported to the Government, but in no case was a formal investigation under the Act considered necessary. Two Assistant Harbour Masters were, however, punished by the Commissioners, one of them severely.

16. The work of examining boats, while plying, was regularly attended to throughout the year by the Surveyors. During the year 314 cargo, and 167 passenger, boats were called in for resurvey. Of these 273 cargo boats and 143 passenger boats had become unfit for service through wear and tear, and 41 of the former and 24 of the latter had become so by meeting with accidents.

17. The total receipts under the head "Port Approaches" amounted to Rs. 5,99,777, towards which the port dues, re-imposed from the 1st of December 1892, contributed Rs. 3,93,532. The expenditure amounted to Rs. 4,83,948.

18. The several channels in the river, with the exception of the Dredge Channel, the Jellingham Channel, and the river bed between Kulpi and Mud Point, have remained fairly steady. At the Dredge Channel very large changes have occurred, owing principally to the Jellingham Channel, the rapid and variable changes in which were noted in the Resolution on the last Annual Report of the Commissioners, and still continue. This is a specially dangerous channel, and the Lieutenant-Governor desires that the Commissioners will continue to take efficient measures for surveying and publishing the changes that are daily occurring.

19. The receipts from Special Tolls, levied under section 108 of the Calcutta Port Act, 1890, amounted to Rs. 8,13,398, against Rs. 7,95,110 in the previous year.

20. The receipts of the Kidderpore Docks which were entered by 132 vessels during the year (against 39 in the year preceding) amounted to Rs. 3,15,466 as shown below :—

	Rs.
Receipts from graving dock	85,511
" " imports	74,220
" " exports	1,18,098
Rent and miscellaneous	29,319
Railway earnings	5,272
Receipts from towing vessels by hopper barges	3,046
Total	3,15,466



Against this, the expenditure has amounted to Rs. 12,27,048, details of which are given below:—

					Rs.
Traffic establishment	...	...	...	...	66,087
Working expenses	...	...	...	...	2,54,835
Repairs	...	...	...	...	11,254
Municipal taxes	...	...	...	...	1,44,080
Interest on capital	...	...	...	...	7,50,792
				Total	12,27,048

The total deficit is therefore shown to be Rs. 9,11,582, and would have been greater by four lakhs of rupees had not interest to that amount been temporarily suspended. Apart from the municipal taxes, and the charges on account of interest and repairs, it is observed that the expenditure on "Traffic establishment" and "Working expenses" exceeded the income by Rs. 19,756. The Lieutenant-Governor believes that the Commissioners are fully awake to the importance of securing fuller utilization of the Docks and obtaining a larger return from them, so as to obviate the necessity of maintaining the special toll which cannot but be prejudicial to the trade of Calcutta.

21. The thanks of the Government are due to the Commissioners for their efficient management of the affairs of the Trust.

By order of the Lieutenant-Governor of Bengal,

A. D. McARTHUR, *Lieut.-Col., R.E.,*

*Offg. Secretary to the Govt. of Bengal.*

WORKING OF THE LICENSED WAREHOUSE AND FIRE-BRIGADE ACT,  
I OF 1893, IN THE HOWRAH MUNICIPALITY  
DURING THE YEAR 1894-95.

No. 3710M., the 29th October 1895.—The following Report is published for general information in accordance with the provisions of section 41 of the Licensed Warehouse and Fire-Brigade Act, I of 1893.

H. H. RISLEY,  
Secretary to the Government of Bengal.

No. 819M., dated Burdwan, the 12th October 1895.

From—J. A. BOURDILLON, Esq., Offg. Commissioner of the Burdwan Division,  
To—The Secretary to the Government of Bengal, Municipal Department.

I HAVE the honour to submit a printed copy of the Annual Report on the Working of the Jute Warehouse and Fire-brigade Act within the Howrah Municipality during the year 1894-95. A statement showing the demand, collections, remissions and balances in Howrah on account of contributions for the Fire-brigade during 1894-95 has also been prepared under my orders and is submitted herewith.

ANNUAL REPORT FOR 1894-95, UNDER THE LICENSED WAREHOUSE  
AND FIRE-BRIGADE ACTS IV AND I, RESPECTIVELY, OF 1883 AND 1893.

Dated the 6th May 1895.

From—J. L. DUNBAR GARDENER, Secretary, for Chairman, Howrah Municipality,  
To—The Magistrate of Howrah.

I HAVE the honour to report on the working of the licensed warehouses in this Municipality for the year 1894-95. There were in all 283 warehouses comprised of the following:—

For storage of jute	...	24
Ditto cotton	...	41
Ditto straw	...	80
Ditto wood	...	136
Ditto rags	...	1
Ditto hay	...	1

2. The income from license fees on these warehouses for the year under report amounted to Rs. 4,002, plus Rs. 348 on account of arrears for 1893-94, and in accordance with Municipal No. 57T.—M., dated the 11th of May 1894, the income from extra fees on account of the additional demand for arrears of 1893-94, amounted to Rs. 1,715. A statement appended gives details of the collections under the three different heads. A classified list of the licensed cotton and jute warehouses is given in Appendix A, these being the most important; while for the other numerous warehouses no list is given. Three new jute warehouses were added to the old list, together with five new cotton warehouses, making a total of eight new and additional jute and cotton warehouses established during the year.

3. In addition to the jute and cotton warehouses licensed during the year under the new Act, there were 218 warehouses other than jute and cotton, such as those for the storage of wood, straw, hay and rags. These warehouses, previous to the year 1893-94, were licensed under section 261 of Act III (B.C.) of 1884, but in July 1893 were brought under the provisions of Act I (B.C.) of 1893.

4. The amount of fines from prosecutions instituted during the year under section 14 of the new Act was Rs. 21, plus Rs. 178, a similar receipt under fines from prosecutions instituted during 1893-94.

5. The expenditure incurred in assessing and collecting the license fees, in supervising the Department in which this work was done, together with contingencies, amounted to Rs. 901; particulars in detail being given below:—

		Rs.	A.	P.
1. Salary of General Supervisor and Assessor	...	600	0	0
2. Ditto Clerk	...	240	0	0
3. Ditto Peon for one month	...	7	0	0
4. Contingencies	...	53	14	0
Total	...	900	14	0

6. One payment alone, on account of a refund of an excess collection, was made during the latter portion of the year amounting to Rs. 60-1.

7. The Fire-brigade establishment, as hitherto, remained under the control of the Commissioner of Police, Calcutta. The Fire-brigade Station in Howrah is most centrally situated, standing next to the Municipal Market, and so located as to admit of the watch overlooking the whole town and detecting all fires occurring. There were thirteen fires during the year. A statement in Appendix B shows the particulars of each fire, with the destruction of property in each individual instance.

8. The total amount remitted to the Commissioner of Police during the year was Rs. 3,279, as required by Municipal Department Municipal No. 57T.—M., dated the 11th of May 1894, against the demand for the year under report, but towards the subsequent additional demand of Rs. 1,682 for 1893-94, no remittance could be made for want of funds. It is proposed, however, to pay this demand during the current official year.

Statement showing in detail the current collections of the year under report, the collections of arrears for 1893-94, and the collections on account of the additional demand for 1893-94.

	Amount realized against demand for 1894-95.	Amount realized against arrears for 1893-94.	Amount realized against additional demand for 1893-94.
1	2	3	4
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Jute ... ..	2,128 1 9	57 12 0	1,408 1 3
Cotton ... ..	714 0 0	.....	306 10 9
Hay ... ..	1 10 9	.....	.....
Straw ... ..	66 11 0	16 9 6	.....
Wood ... ..	1,084 10 0	261 15 0	.....
Rags ... ..	6 11 6	6 11 6	.....
Total ... ..	4,001 13 0	343 0 0	1,714 12 0

## APPENDIX A.

List of Jute and Cotton Warehouses licensed or exempted during the year 1894-95.

Register number.	Name of owner or occupier or both.	Locality.	Number of warehouses.	Annual valuation.	Amount of arrears fees realized against additional demand for 1893-94.	Amount of fees realized for the year 1894-95.	Total amount of fees.	Date of payment.	Remarks.
1	2	3	4	5	6	7	8	9	10
	<i>Jute.</i>			Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
1	Messrs. P. E. Gurdar and Company.	36, Jaya Bibi's Lane...	3 warehouses	6,000	150 0 0	210 0 0	360 0 0	8th May 1894.	
1a	Ditto ditto	36, ditto	3 ditto	750	75 0 0	23 4 0	101 4 0	18th Sept. "	
2	Central Jute Mills Company, Limited.	36, ditto	2 ditto	3,000	276 3 0	106 0 0	381 3 0	8th May "	
3	Nasmyth's Patent Press Company, Limited.	95, Old Ghusari Road	15 ditto	11,000	.....	387 1 6	387 1 6	5th July "	
4	W. H. Harton and Company	123, ditto	2 ditto	600	.....	.....	.....	.....	
5	Ditto ditto	123, ditto	Portion of warehouses.	450	.....	.....	.....	.....	
6	Messrs. Anderson Wright and Company.	29, Howrah Road	13 warehouses	8,250	206 4 0	288 12 0	495 0 0	12th May 1894.	
7	Messrs. Burjorji Framji	4, Khetra Mitra's Lane	6 ditto	.....	180 3 0	233 11 3	413 3 3	5th May 1894.	
8	Messrs. Hawarh and Company.	64, Rosemary Lane	9 ditto	7,230	.....	.....	.....	.....	
9	Howrah Mills Company, Limited.	451, Grand Trunk Road	7 ditto	6,695	223 5 0	311 5 3	533 10 3	12th " "	
10	Ganges Jute Manufacturing Company, Limited.	449, ditto	2 ditto	2,677	60 14 9	93 11 3	160 10 0	18th " "	
11	Sibpur Jute Manufacturing Company, Limited.	74, Kawrapara Ghat Road.	2 ditto	3,300	83 9 0	115 8 0	199 0 0	22nd " "	
12	Ditto ditto	31, Raj Narain Rai Chaudhri's Ghat Road.	2 ditto	2,400	60 0 0	.....	60 0 0	15th Oct. "	
13	Messrs. Ahmuty and Company.	88, Shalimar Road	2 ditto	1,000	25 0 0	25 0 0	50 0 0	6th May "	
14	Subal Chandra Mallik	24, College Road	1 warehouse	180	4 8 0	.....	4 8 0	20th Aug. "	
15	Messrs. Bissendyal and Hurdyal, Agents for Salkia Pressing Company, Limited.	97, Old Ghusari Road	1 ditto	2,474	.....	86 9 0	86 9 0	22nd May "	
16	Shyamra Charan Kundu	14-2, Babudanga Lane	1 ditto	144	3 9 6	5 0 6	8 10 0	17th " "	
17	Hari Charan, Larin Chand Khottai, and Rasik Lal Day.	14, Narket Bagan Lane	8 warehouses	84	.....	2 15 0	2 15 0	21st April "	
18	Shyamra Charan Kundu	185, Haraganj Road...	2 ditto	750	.....	26 4 0	26 4 0	17th May "	
19	Chintamani Day	1, Kuchil Sarkur's Lane.	4 ditto	300	.....	.....	.....	.....	
20	East Indian Railway	25, Howrah Ghat Road	Portion of goods sheds.	1,200	61 9 0	42 0 0	103 9 0	28th June 1894.	
21	Ditto ditto	28, Dobson's Road	Ditto	1,000	51 4 0	25 9 0	76 4 0	29th " "	
22	Messrs. Marcus Koch	123, Old Ghusari Road	Open ur land...	3,000	.....	105 0 0	105 0 0	12th Dec. "	
23	Howrah Mills Company, Limited.	Grand Trunk Road	Open land	300	.....	.....	.....	.....	
					1,465 13 3	2,128 1 9	3,593 15 0		



## APPENDIX A—concluded.

Name of owner or occupier or both.	Locality.	Number of warehouses.	Annual valuation.	Amount of arrears less realized against additional demand for 1893-94.	Amount of fees realized for the year 1894-95.	Total amount of fees.	Date of payment.	REMARKS.
1	2	3	4	5	6	7	8	9
<b>Cotton.</b>			Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
Ghusari Cotton Mills Company, Limited.	97, Old Ghusari Road...	1 warehouse	2,000	50 0 0	70 0 0	120 0 0	12th May 1894.	
The Ramdial Cotton Mills.	158, Naskarpura Lane	1 ditto	2,200	50 0 0	79 12 9	129 12 9	28th April and 27th June 1894.	
Jumna Das, Brama Datta, owners, and Hurmuk Rai Fulchand, occupiers.	158, Old Ghusari Road	3 warehouses	2,000	50 0 0	70 0 0	120 0 0	16th May 1894.	
Hormunda Bai Fulchand	158, ditto	3 ditto	2,000	...	70 0 0	70 0 0	24th "	
Bissendyal and Hardyal, owners, and Messrs. Brunschausen and Company.	25, ditto	4 ditto	2,000	50 0 0	70 0 0	120 0 0	1st Oct. "	
Mohar Sing Chaudhri, owner.	24, ditto	2 ditto	400	...	14 11 2	14 11 2	24th May "	
Hurdial Suraka, occupier.	160, ditto	4 ditto	600	...	21 0 0	21 0 0	25th "	
Kailash Chandra Datta, Estate of Ganga Narain Chandra, owner, and Behari Lal Marwari, occupier.	26, ditto	...	300	...	...	...	...	
Mehar Ali Akbar, owner, and Kailash Chandra Ghose, occupier.	170, ditto	1 warehouse	670	16 12 0	23 15 3	40 11 3	23rd May 1894.	
Ganesh Das Jaisram	171, ditto	1 ditto	650	16 4 0	22 12 0	39 0 0	23rd "	
Neharml Bhanram	15, ditto	...	120	...	...	...	...	
Ditto	16, ditto	...	360	...	...	...	...	
Ditto	17, ditto	...	324	...	...	...	...	
Ditto	20, ditto	...	300	...	...	...	...	
Ditto	21, ditto	...	144	...	...	...	...	
Kuchil Chandra Sarkar	8-1, ditto	...	120	...	...	...	...	
Shayama Charan Kundu	2-1, ditto	1 warehouse	120	3 0 0	4 3 3	7 3 3	18th May 1894.	
Ditto	3, ditto	3 warehouses	440	11 0 0	15 6 3	26 6 3	18th "	
Shadhran Ramji Das	182, ditto	...	200	...	...	...	...	
Shayama Charan Kundu	10, Gurgalla Lane	3 warehouses	300	7 8 0	10 2 0	18 0 0	18th May 1894.	
Hanpratap Dora, owner, and Bhagaban Das Agarwalla, occupier.	173, Old Ghusari Road	1 warehouse	300	7 8 0	10 2 0	18 0 0	23rd April "	
Brammaya Debi and Akhaya Kumar Mukharji.	122, Haraganj Road	11 warehouses	2,800	...	80 8 0	80 8 0	19th May "	
Bhagaban Chandra Banerji and Ram Lal Banerji.	46, Howrah Road	10 ditto	2,100	...	73 8 0	73 8 0	29th "	
Sundari Bibi, owner, and Gujarmul, occupier.	27, Haraganj Road	1 warehouse	144	3 9 6	5 0 6	8 10 0	17th "	
Messrs. Moran and Company.	48, Howrah Road	...	1,540	...	...	...	...	
Hurmuk Rai Fulchand	54, ditto	...	504	...	...	...	...	
Ramsadai Ghose, owner, and Gujarmul, occupier.	164, Haraganj Road	1 warehouse	240	6 0 0	8 6 3	14 6 3	17th May 1894.	
Bissenhar Shaw, owner, and Hurdial, occupier.	161, ditto	1 ditto	156	3 14 3	5 7 3	9 5 6	18th "	
Gogopal Pal, owner, and Gujarmul, occupier.	170, ditto	1 ditto	120	...	4 3 3	4 3 3	5th "	
Ramsadai Ghose and Bissenhar Shaw, owners, and Hurdial, occupier.	177, ditto	1 ditto	144	3 9 6	6 0 6	8 1 0	18th "	
Ramrik Pal, occupier.	177, ditto	1 ditto	60	1 8 0	2 1 6	3 9 6	24th "	
Ramsadai Ghose and Bissenhar Shaw, owners, and Brijdaban Chandra, occupier.	177, ditto	...	144	...	...	...	...	
Ramsadai Sadkhan, owner, and Mohan Lal and Kissen Lal, occupiers.	48, Howrah Road	3 warehouses	120	3 0 0	4 3 3	7 3 3	27th April 1894.	
Hurdial Suraka, owner, and Mohan Lal and Kissen Lal, occupiers.	40, ditto	1 warehouse	240	6 0 0	8 6 3	14 6 3	27th "	
Hurdial Suraka, owner, Kharakmul and Gujarmul, occupiers.	51, ditto	1 ditto	240	6 0 0	8 6 3	14 6 3	17th May "	
Radha Nath Banerji, owner, Kharakmul and Gujarmul, occupiers.	166, Haraganj Road	1 ditto	280	7 3 3	10 1 3	17 4 6	17th "	
Bissenhar Shaw, owner, and Kunja Lal Marwari, occupier.	161, ditto	1 ditto	126	3 14 3	5 7 3	9 5 6	21st Sept. "	
Durga Marwari	185, Old Ghusari Road	2 warehouses	46	...	1 10 9	1 10 9	21st April "	
Nanuk Ram and Baldeb Das.	184, ditto	2 ditto	96	...	3 5 9	3 5 9	21st "	
Bakum Chand Marwari	Haraganj Road	1 warehouse	72	...	2 3 3	2 3 3	24th May "	
Jadhu Sudan Kundu, owner, and Behari Lal Marwari, occupier.	10, ditto	1 ditto	84	...	2 15 0	2 15 0	25th "	
			306 10 9	714 0 0	1,020 10 9			

HRIDAI KRISHNA BANERJI,

License Clerk.

J. L. DUNBAR GARDENER,

General Supervisor, Assessor and License Officer.

The 6th May 1895.

## APPENDIX B.

*Statement of Fires which occurred within the Howrah Municipal limits during the year 1894-95.*

Number.	Date.	Locality.	Duration of fire.	Approximate value of property destroyed.	REMARKS SHOWING NATURE OF DAMAGE, &c.
1	2	3	4	5	6
1	15th May 1894	Banstala Road, Sibpur	Time of outbreak of fire, 11-2 A.M., extinguished by the residents of the locality before the Fire-brigade arrived.	Rs. 10	One straw hut, not insured.
2	24th October	Banstala Ghat Road, Sibpur	1 hour and 30 minutes	200	One brick walled house with tiled roof, not insured.
3	22nd November	Howrah Mills, Sibpur	3 days 2 hours and 45 minutes.	1,24,000	A large brick building containing 24,000 maunds of jute cuttings in bales, insured.
4	10th December	Ghusari, Howrah	1 hour and 35 minutes	100	A pile of loose jute brought from the late fire at the Calcutta Hydraulic Press at Chitpur to be dried, insured.
5	18th January 1895	East Indian Railway Station, Howrah.	1 hour and 15 minutes	12,000	A wooden building with iron roof used as a mail service Post Office and 5,000 empty mail bags, also a quantity of records and blank forms, not insured.
6	2nd February	Dhobapara	1 hour and 30 minutes	40	Two golpata huts containing four rooms, not insured.
7	24th	Chow Bagan, Sibpur	2 hours	40	A golpata hut, a portion of which was burnt, not insured.
8	7th March	Baje Sibpur, Sibpur	2 hours	100	Three straw huts, not insured.
9	9th	Peelkhana, Grand Trunk Road, Howrah.	15 minutes	8	One small room in a straw hut, not insured.
10	10th	Sriharinapara, Sibpur	3 hours and 50 minutes	50	A straw hut, not insured.
11	21st	Nandi Bagan, Grand Trunk Road, Howrah.	4 hours	600	Six golpata huts, a large quantity of loose cotton, not insured.
12	21st	Khora Bagan, Sibpur, Howrah	Time of outbreak of fire, 2-30 P.M., extinguished by the residents of the locality before the Fire-brigade arrived.	50	One thatched hut, not insured.
13	22nd	Chow Bagan, Sibpur	1 hour and 5 minutes	40	One golpata hut, not insured.

CALCUTTA,  
The 20th April 1895.

A. B. BARNARD,  
Deputy Commissioner of Police.

*Statement showing the Demand, Collection, Remission and Balances in Howrah on account of contribution for the Fire Brigade during 1894-95.*

DESCRIPTION.	DEMANDS.			COLLECTIONS.			REMISSION.			BALANCES.		
	Arrear.	Current.	Total.	Arrear.	Current.	Total.	Arrear.	Current.	Total.	Arrear.	Current.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13
a. Rate on warehouse under sections 10 and 24	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
b. Rate on other godowns under section 25(1)a	2,435 9 9	4,545 5 6	6,980 15 3	2,067 12 0	4,001 13 0	6,069 9 0	46 12 9	242 7 0	289 2 9	331 1 0	301 1 0	632 2 0
c. Rate on bustees under section 25(1)b				No assessments were made under this section.								
d. General rate under section 25(1)c												
Total	2,435 9 9	4,545 5 6	6,980 15 3	2,067 12 0	4,001 13 0	6,069 9 0	46 12 9	242 7 0	289 2 9	331 1 0	301 1 0	632 2 0

E. A. PARSICK,  
General Supervisor, Assessor and Licensor of

WEATHER AND CROP REPORT.

For the week ending the 28th October, 1895.

**Burdwan.**—Rainfall at Sadar nil. Weather cooler. Rain still wanted. Fodder sufficient. Common rice sells at an average price of 16 seers per rupee.

**Midnapore.**—It is drizzling the whole of today (28th). Weather changeable. *Rabi* crops are being sown. Sugarcane doing well. Common rice is selling at 17 and 15 seers per rupee at Sadar and Ghatal respectively.

**24-Parganas.**—Rainfall at Sadar .27. Weather seasonable, but rainy in the latter part of the week. Prospect of *aman* paddy on high lands is not favourable. Steeping of jute not yet complete for want of water. Sowing of *rabi* crops going on. Fodder and water sufficient. No cattle-disease. Rice sells at—

				Srs.	
Sadar	...	...	...	12 to 14	} per rupee.
Barasat	...	...	...	15	
Basirhat	...	...	...	16	
Diamond Harbour	...	...	...	17	

**Murshidabad.**—No rain. Weather seasonable. *Aman* suffering for want of rain; outturn estimated at eight annas. Indigo and *rabi* crops are being sown, but rain much wanted for these crops also in high lands. Sugarcane, *kalai* and mulberry are doing well. Fodder sufficient. Common rice sells at 16 seers a rupee.

**Khulna.**—Rainfall at Khulna .22. Weather cooler. Harvesting of jute is over. Standing crops doing well;  $\frac{1}{2}$  of *aman* land in the Sadar subdivision and 22,000 acres in the Satkhira subdivision estimated to be still unplanted. Fodder and water sufficient. No cattle-disease. Prices of common rice:—

				Srs.	c.	
Sadar	...	...	...	17 to 21	0	} per rupee.
Bagerhat	...	...	...	22	2	
Satkhira	...	...	...	16	0	

**Dinajpur.**—Rainfall .02. Standing crops good. Price of common rice 15 to 16 seers a rupee. No outbreak of cattle-disease, nor any complaint for fodder or drinking water.

**Rangpur.**—Rainfall nil. Weather cloudy and cool. Washing of jute still going on. Land under preparation for cold-weather crops. Prospects of *aman* good, but rain is wanted. Price of common rice from 12 to 14 seers per rupee. Fodder sufficient.

**Pabna.**—Rainfall 1.07. Weather cloudy and rainy. Prospects of *aman* paddy good. Sowing of *rabi* crops has commenced. Common rice sells at 16 seers per rupee. Fodder sufficient.

**Dacca.**—Rainfall nil. Weather warm in day, cool at night. Prospects of standing crops good. Price of common rice 17 seers per rupee. No cattle-disease.

**Chittagong.**—No rain. Weather dry and cold. Rain needed for *aman* crop and *rabi* sowings. Water and fodder sufficient. Rice selling at 17 seers per rupee.

**Patna.**—Rainfall at Sadar .02. Prospects of paddy fair. *Rabi* sowings in progress. Some more rain wanted. Condition of cattle good. Fodder and water sufficient. Common rice selling at 20 seers per rupee.

**Gaya.**—No rain except a drizzle. Winter rice and *rabi* both suffering much. Price of common rice at Sadar 14 seers against an average of 14½ seers per rupee.

**Champan.**—No rain at Motihari. *Rabi* being sown. Prospects of *aghani* good, but rain is needed for the high lands. Fodder and water for cattle sufficient.

**Darbhanga.**—No rain. Latter part of week cloudy. Rice suffering on high lands and will be considerably injured if no rain falls within a week. Rain also wanted for the *rabi* crops. Prices almost stationary.

**Bhagalpur.**—Weather cloudy, but no rain worth mentioning. Early cessation of rain has materially altered the prospect of winter rice. Paddy on high lands, where it cannot be irrigated, is drying for want of rain. Other crops doing well. Coarse rice sells at 18½ seers per rupee. Fodder and water sufficient. No cattle-disease.

**Purnea.**—Rainfall .01. *Rabi* sowings going on. Paddy on high lands drying up for want of rain. No cattle-disease.



**Cuttack.**—Rainfall .82. Weather hot and cloudy. *Sarad* in ear and attaining maturity. Condition of cattle good. Fodder sufficient. Prices of common rice—

				Srs. c.	
Cuttaok	...	...	...	22 5	} per rupee.
Jajpur	...	...	...	26 4	
Kendrapara	...	...	...	30 0	
Banki	...	...	...	31 8	

**Hazaribagh.**—Rainfall at Sadar 3.10. Paddy on high lands considerably injured by the long continued drought. *Rabi* prospects greatly improved by recent rainfall. Fodder ample. Common rice selling at 13 to 15 seers per rupee.

**General Summary.**—There was rain on the 27th and 28th instant throughout the greater part of the province, except in Bihar and parts of North and East Bengal. This rain will benefit the rice crop and will be good for the *rabi* sowings. In Bihar the absence of the “Hathia” or October rain has been detrimental to the prospects of the rice crop. No cattle-disease is reported. The price of common rice is generally steady.

By order of the Lieutenant-Governor of Bengal,

REVENUE DEPARTMENT,  
The 29th October, 1895.

C. E. BUCKLAND,  
Secretary to the Government of Bengal.

## Results of the Meteorological Observations taken at the Alipore Observatory from 20th to 26th October 1895.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.		
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.				
1895.		°		Inches.	°	°	°	°	°	Inches.	°	%			Inches.			
Oct.	20th	146.5	9.6	29.858	80.1	88.5	18.4	72.1	74.9	0.797	72.4	79	Variable and calm	38	Nil	Chiefly	clear,	
"	21st	142.9	10.1	.866	79.9	88.7	15.7	73.0	73.0	.728	69.5	73	WNW and calm	48	"	Chiefly	clear,	
"	22nd	141.4	10.2	.885	77.3	86.7	18.0	68.7	71.2	.686	68.0	75	NNW and calm ...	28	"	Chiefly	clear,	
"	23rd	140.4	9.8	.858	77.6	87.2	18.2	69.0	72.3	.723	69.5	78	WSW, W by N and calm.	53	"	Clear,		
"	24th	144.5	9.6	.849	77.8	86.7	18.0	68.7	71.6	.694	68.3	75	WSW and calm	33	"	Clear,		
"	25th	140.4	8.7	.891	78.1	86.4	16.1	70.3	72.8	.735	70.0	78	SE by E, ESE and calm.	36	"	Partially	cloudy,	
"	26th	132.7	2.1	.939	76.6	82.9	11.7	71.2	72.6	.748	70.5	82	SE by E, SE and variable.	49	0.08	Chiefly	cloudy, o, g, d,	

The mean pressure of the seven days ... .. Inches. 29.878

The average pressure of the corresponding period for 24 years, Surveyor-General's Office ... .. 29.860

The total number of hours of bright sunshine ... .. Hours. 60.1

The maximum possible number of hours of sunshine ... .. 80.1

The mean temperature of the seven days ... .. 78.2

The average temperature of the corresponding period for 24 years, Surveyor-General's Office ... .. 80.1

The extreme variation of temperature ... .. 20.0

The maximum temperature ... .. 88.7

The highest velocity of the wind in one hour ... .. Miles. 7

The mean relative humidity ... .. % 77

The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office ... .. 78

The total fall of rain from 20th to 26th October 1895 ... .. Inches. 0.08

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 1.68

The total fall from 1st January to 26th October 1895 ... .. 38.81

The average fall of the corresponding period for 24 years, Surveyor-General's Office ... .. 64.06

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h., 10h., 16h. and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; Δ, dew.

METEOROLOGICAL OFFICE, GOVT. OF INDIA,  
Calcutta, the 28th October 1895.

J. H. GILLILAND,  
For Meteorological Reporter to the Govt. of India.























**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS  
TAKEN IN ASSAM, FOR THE MONTH OF SEPTEMBER 1895.**

WEATHER during September was characterised by an absence of rainfall in all districts, and as this was accompanied by comparatively cloudless skies, temperature was considerably higher than usual, especially by day. The nights on an average for the whole month were warmer than usual, but not to such an extent as the days, excess in mean maximum temperature being nearly three times as great as that in the mean night readings.

A peculiarity in the rainfall distribution during August, indicating the weakness of the monsoon current, was the limited extent of country over which rain, when heavy and general, fell. The heavy rain referred to above, is what is caused by the cyclonic storms beginning over the Bay and moving across the province. This want of generality in the rainfall was even more marked during September than in August, on the two occasions when cyclonic storms occurred, that is, in the first week and about the middle of the third week. A third disturbance was developing in the south of the Bay at the end of the month, and ultimately caused stormy weather in the north of the Bay and in Lower Bengal, but as that was after the beginning of October, an account of it will be given later.

The cyclonic storm at the beginning of the month moved in a westerly direction across the Bay and passed over the Circars. The changes, however, which followed led to a strong inrush of moist winds into the north-east of the Bay, over East Bengal, and gave rise to very heavy rain in Assam and North Bengal. As indicating the irregular distribution of the rainfall during that period when general rain might have been expected over the whole province, I quote figures given in the report for the week ending on the 14th September. The mean rainfall for that week in North Bengal was 6·9, and in East Bengal 4·83 inches, each being about double the normal fall. For the same period the fall in Chota Nagpur was half an inch, less than a quarter of the normal fall; and in Orissa 1·45 inches, rather more than half the normal.

On the second occasion of disturbed weather between the 18th and 20th, when a cyclonic storm crossed the north-west angle of the Bay, passed over part of Orissa, Chota Nagpur, and South-West Bengal, and caused very strong winds in Bihar, very little rain fell in the eastern part of the province. The average rainfall in Orissa and Chota Nagpur for the week ending on the 21st was more than 4 inches, about double the normal, and in North Bengal it was just half the normal.

During September a very large proportion of the rainfall is caused by these cyclonic storms, and the scanty rainfall of the present year in this month is due to the fact that monsoon weather accompanying the two storms was not general over the province. At such times the rainfall should be in large excess, because during the breaks of fine weather, when practically no rain falls, there is an accumulating deficiency to be made up when storms occur.

One important feature of the storms of the present monsoon season has been the very quick recovery, so that the monsoon weather which followed the storms was of but short duration. In the case of the first storm of the month, a very rapid rise of pressure obtained in the north-west of the Bay, and the distribution over the area, including the Bay and the province of Bengal, underwent a complete change almost within a few hours. From being low in the Circars on the 6th, pressure changed, so that lowest readings were along the foot of the Himalayas on the 7th—an arrangement which remained for several days and led to the heavy rain in North Bengal and Assam. The peculiarity was even more marked after the second storm. On the 20th the centre of the depression was in the North-West Provinces, so that pressure within the province of Bengal was lowest in Bihar. Gradients were very steep from east to west, and the strong winds referred to above were then general in the west of Bihar. On the 21st pressure was unusually uniform, not only over Bengal, but also over the Bay, and instead of being strong and easterly in Bihar, winds were light and westerly.

When the rapid recovery was occurring in both cases, a double change was in action. Along with the rapid rise of pressure over the area chiefly affected by the storm, a fall was general in the east or north-east where pressure at that time was highest.

Had the changes in the rear of the storm been slower and the period of recovery more protracted, there would in all probability have been more general rainfall, because in that case the moist current would have had time to spread over the whole province.

The first disturbance had begun to develop before the end of August, but at the beginning of September it was still but slight. Pressure gradients were becoming steeper in the south of the Bay, and a fairly regular cyclonic circulation of winds obtained in the north and centre of the Bay. The changes during the first few days were very irregular, and the reports received from the coast stations gave little indication of what was happening where pressure was lowest. The depression while in the east of the Bay was diffused and shallow, but as it was moving in a westerly direction, there was some likelihood of its developing into a more serious disturbance before it reached the opposite coast. There was a rapid rise of pressure in Bengal on the 2nd, and a brisk rise over the north of the Bay, after which the differences from normal readings varied from excess of ·07 inch in Bihar and North Bengal to defect of ·1 inch in the south-east of the Bay. The rise continued with moderate rapidity

almost all round the coast on the 8th, and readings were practically normal. The changes near the centre of the disturbance must have been large, as it continued to move steadily towards the west, and on the 5th was near the part of the coast between Coconada and Vizagapatam. The centre crossed the coast near Coconada on the afternoon of the 5th, and the storm was felt with considerable severity between Vizagapatam and Masulipatam. The lowest reported barometric reading was 29.28 inches at Coconada at 2 P.M., and the highest set in, and by 8 A.M. on the 6th the distribution in that part of the Bay was nearly normal. The stormy weather quickly moderated, but the after-effects of the disturbance were felt for some days in strong south-westerly winds in the north-west of the Bay and moderately strong winds in Bengal.

In consequence of the changes of pressure which followed, and which have already been referred to, the area of lowest pressure was soon transferred to the foot of the Himalayas, and the heavy rainfall began in North Bengal and Assam. Sibesar reported 4 inches on the 7th, Dhubri 8 inches on the 8th, and a number of places more than 6 inches on the 9th. After that it was neither so general nor so heavy, but showers became more common in the west of the province, being caused by thunderstorms. Only scattered showers, usually light, fell from the 10th to the 17th, during which time a depression was slowly forming in the south of the Bay and moving towards the north.

The depression was very feeble till the 17th, when a change which had been going on in the south of the Bay for two or three days became more noticeable. This was a steepening of the gradients, not owing to a fall of pressure near the centre of the disturbance, but to a rise in the south. The change seemed to come from the extreme south of the Bay, and was accompanied by a strong advance of monsoon winds and very heavy rainfall probably over the wide sea area between the Tenasserim and Madras coasts, as Tavoy reported 5 and Cuddalore 3 inches of rain on the 15th. There was, consequently, a shallow diffused low-pressure area over the north of the Bay, while from the south was coming a strong advance of monsoon winds, due to some cause other than the depression. The slow to moderate fall of pressure went on over the north of the Bay on the 16th and 17th; and the slow northerly movement of the depression continued. But about this time, the two actions appeared to combine, the steep gradients having closed up towards the north. The disturbance concentrated chiefly owing to the rapid rise of pressure over an area extending from the south of Burma to the extreme north of the province, and the energy conveyed to it by the inrush of monsoon winds from the south caused a deepening at the centre which was most apparent after the depression was over the land.

On the 18th the centre was in the north-west angle of the Bay, about equally distant from False Point and Saugor Island, and before 8 A.M. of the 19th it had crossed the coast line between Saugor Island and Balasore, probably at no great distance from the latter station. Owing to the quick development of the disturbance on the 18th and the steep gradients over the whole Bay, weather became stormy in the north-west angle. It also changed quickly over the province. From being fine with only occasional showers, cloudy-rainy weather became general. As the storm moved over Chota Nagpur there was a rapid fall of pressure, and the depression deepened near the centre. Strong easterly winds prevailed in all districts except Orissa, and there was no loss of strength on the following day, as a gale of wind blew in Bihar after the area of lowest pressure had passed into the North-Western Provinces. The strongest winds recorded this season were at some of the extreme western stations of Bihar, and the highest average velocity for 24 hours was 42 miles an hour at Dehri.

From the 18th to the 20th rainy weather prevailed, the heaviest falls being in the western districts and at Darjeeling, where 12 inches fell in two days. The recovery was unusually quick. A rapid rise of pressure in the west on the 21st and a slow fall in the east gave a distribution of great uniformity over the whole area. The skies cleared and rainfall became light and scattered at all stations.

From the 21st to the end of the month fine settled weather prevailed over the province with only a few scattered showers. For the week ending on the 28th the average rainfall varied from a fifth of an inch in Chota Nagpur to .9 inch in East Bengal.

During the last few days of the month a low-pressure area formed in the south of the Bay, and appeared, up till the 29th, to be moving towards the Madras coast. It began to show signs of intensifying on the 29th, when a rapid rise of pressure in Burma caused steeper gradients in the east of the Bay. That stormy weather was following the depression was shown by the wind velocity at Diamond Island increasing to an average of 26 miles an hour on that day, the highest recorded there during the present monsoon season. The depression was probably deepening near the centre, and the rapid rise in Burma was the indication that it had begun to move to the west. The direction of motion of the storm changed on the 30th more to the north, and the centre ultimately passed close to False Point and Saugor Island, and probably over Barisal and Comilla. Very stormy weather was experienced especially in East Bengal, where the barometer fell below 29 inches.

*Pressure.*—As weather was fine and settled during a larger proportion of the month than usual, pressure changes have as a rule been unimportant. Very large changes occurred during the two disturbances at the beginning and soon after the middle of the month, and the rise especially which followed the movement of the depressions was very rapid. The uniform distribution which precedes that characteristic of the cold-weather season was well

marked during the last week, and though interrupted for a few days by the storm at the end of September and the beginning of October, it was soon afterwards restored. The mean distribution for the whole month is considerably more uniform than usual, and readings are above the normal at all stations. The greatest excess is .03 inch in the western districts from which it diminishes towards the north-east, being less than .1 inch in Assam.

**Temperature.**—In consequence of the sky being less cloudy than is usual in September, temperature has been high, especially during the day. Notwithstanding the cool weather which was caused by the disturbances, the mean maximum temperature is much above the normal, and the nights also are somewhat warmer, except in Assam and at Mymensingh and Sirajganj. Excess in maximum temperature varies from a few tenths of a degree in the east of the province to 3° at Chaibassa and Balasore. Excess in mean minimum temperature is generally about 1°. For the large divisions mean excess varies from a little less than 1° in East Bengal, North Bengal, and Bihar to nearly 2° in Chota Nagpur.

**Rainfall.**—The storm in the early part of the month caused a strong burst of monsoon winds over the east of the Bay, East Bengal, Assam, and North Bengal, and the second one in the middle of the month gave moderately heavy rain in all districts, except East and North Bengal. On this second occasion the falls were heavy in Orissa and Chota Nagpur and moderately heavy in Bihar. At other times the rainfall was almost always scattered and light and much below the normal. The average rainfall for the month is below the normal in all the larger divisions. South-West Bengal received 6.08 inches, or 67 per cent. of the normal; East Bengal, Bihar, and Chota Nagpur from 75 to 78 per cent. of the normal, and North Bengal and Orissa about 90 per cent. The average falls vary from 6.08 inches in South-West Bengal to 12 inches in North Bengal.

In Assam, Silchar received 13.33, Sibsagar 21.31, and Dhubri 26.44 inches.

The actual falls have again been somewhat irregular owing to the scattered rain which fell during a great part of the month. Falls of more than 10 inches have been general in the south of Orissa, and over a strip of country extending up the eastern side of the province and along the foot of the hills, including Chittagong, the eastern half of the Sunderbans, Dacca, Mymensingh, the northern half of North Bengal, and the extreme north of Bihar. Elsewhere the falls are generally between 5 and 10 inches, but a considerable number of stations scattered over all these districts have received 4 inches and a few only 3.

These falls have been above the normal in the south of Orissa, at a few scattered stations in East Bengal, and in some of the northern districts, such as part of Kuch Bihar, Rangpur, Dinajpur, Darbhanga, Muzaffarpur, and Champaran, but over almost the whole province they are in defect by variable amounts. The defect is most uniform in the centre and south, and is largest in part of North Bengal, where the greatest irregularity occurs. The difference from the normal in that division varies from excess of nearly 8 inches at Darjeeling, Rangpur, and Gour to defect of more than 10 inches at Jalpaiguri, Mickliganj, and Mathabhangha. The other part where defect was more than 10 inches was Noakhali. Defect of between 5 and 10 inches occurred in part of Purnea, Malda, Birbhum, Bankura, Midnapore, Nadia, 24 Parganas, and Balasore.

The comparison of the actual rainfall of the various large divisions of the province during the month is most accurately shown in the form of a percentage. The figures representing the rainfall for the month calculated in this way are included in the following table under the heading of September. This table really gives a condensed summary of the rainfall statistics of the present year up to date for each meteorological division, the first nine columns giving the actual average falls in each division for each month expressed as a percentage of the normal, while the tenth column gives the actual rainfall of the first nine months as a percentage of the normal rainfall for that period:—

METEOROLOGICAL DIVISIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	Actual rainfall of first nine months of 1895 expressed as a percentage of the normal fall for the period.
South-West Bengal ...	44	9	29	111	86	82	67	67	67	71
North Bengal ...	27	6	49	129	91	43	165	87	89	92
East Bengal ...	11	1	38	140	133	47	81	90	75	80
Bihar ...	71	88	34	129	70	72	120	102	77	94
Orissa ...	49	101	29	194	46	212	79	116	90	112
Chota Nagpur ...	66	52	71	418	70	109	98	67	78	89

The following table contains full data for the comparison of the actual and normal rainfall of the month of September in all districts of the province. The figures are derived from the average and actual rainfall of the rain-recording stations in each district, due allowance or weight being made for the area which each station represents. This gives a more accurate average than the arithmetical means given in the weekly and monthly meteorological tables. The first column gives the normal or actual average district rainfall as determined from the rainfall observations of the past fifteen years; the second column gives the actual district rainfall as determined from the weighted actual rainfalls of the month at the reporting stations in each district; the third column expresses the ratio of the actual district fall of the past month to the normal rainfall as a percentage, and the fourth

column states as a percentage how much the district rainfall for the month varied from the normal:—

Percentage Table for September 1895.

DIVISION.	DISTRICT.	Normal district rainfall for September.	Actual district rainfall for September 1895.	Percentage of actual to normal rainfall.	Percentage excess (+), defect (-).
South-West Bengal	Burdwan	7.87	6.88	87	- 13
	Birbhum	9.16	10.78	118	+ 18
	Bankura	8.63	6.17	72	- 28
	Midnapore	8.85	7.59	86	- 14
	Hooghly	8.43	6.67	79	- 21
	Howrah	8.61	4.38	51	- 49
	24 Parganas	9.40	5.48	57	- 43
	Calcutta	9.91	4.03	41	- 59
	Nadia	8.62	4.25	50	- 50
	Murshidabad	9.77	8.26	86	- 15
	Jessore	8.43	4.61	56	- 45
	Khulna	9.39	7.72	84	- 17
	Rajshahi	11.26	6.68	60	- 46
	Dinajpur	11.17	9.24	83	- 17
North Bengal	Jalpaiguri	23.93	10.42	43	- 57
	Darjeeling	17.00	25.69	145	+ 45
	Kuch Bihar	21.95	14.63	66	- 34
	Rangpur	13.00	17.17	132	+ 32
	Borra	10.70	11.27	105	+ 5
	Pabna	10.27	7.70	76	- 24
	Dacca	10.05	8.01	80	- 20
	Mymensingh	12.91	11.18	86	- 14
East Bengal	Faridpur	8.68	5.24	60	- 40
	Backergunge	11.36	8.97	79	- 21
	Tippura	11.68	9.06	78	- 22
	Noakhali	16.26	5.36	33	- 67
	Chittagong	14.07	14.47	103	+ 3
	South Lushai Hills	12.72	9.06	71	- 29
	Patna	7.20	5.63	77	- 23
	Gaya	6.90	4.90	72	- 28
Bihar	Shahabad	7.29	6.11	84	- 16
	Saran	7.68	8.12	106	+ 6
	Champaran	9.05	13.95	154	+ 54
	Muzaffarpur	8.27	8.42	102	+ 2
	Darbhanga	9.25	8.96	97	- 3
	Monghyr	7.75	5.71	74	- 26
	Bhagalpur	8.87	6.46	73	- 27
	Purnea	13.53	8.31	61	- 39
Orissa	Malda	10.52	9.60	91	- 9
	Sonthal Parganas	8.06	5.72	71	- 29
	Cuttack	9.53	9.14	96	- 4
	Balasore	11.28	6.97	62	- 38
Chota Nagpur	Puri	9.98	13.11	134	+ 34
	Hazaribagh	8.10	7.22	89	- 11
	Lohardaga	9.44	10.55	112	+ 12
	Palamau	7.82	3.49	45	- 55
	Manbhum	7.08	5.84	76	- 24
	Singbhum	8.81	4.34	52	- 48

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the month of September 1895:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 15th May 1895.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
South-West Bengal	95.7	72.9	91.0	78.8	84.9	+1.5	6.08	9.00	-2.92	6.48	11.04	-4.56	33.25	46.53
North Bengal	93.8	71.2	88.7	77.9	83.3	+0.8	11.97	13.45	-1.48	10.78	13.37	-2.59	40.93	64.21
East Bengal	93.7	72.8	88.2	78.2	83.2	+0.6	9.05	12.08	-3.03	9.76	13.46	-3.70	52.97	67.03
Bihar	96.8	71.3	90.7	78.1	84.3	+0.9	6.50	8.84	-2.34	7.90	10.05	-2.15	30.39	40.79
Orissa	98.7	74.1	90.0	78.6	84.4	+1.5	9.22	10.25	-1.03	10.20	12.48	-2.28	61.38	48.18
Chota Nagpur	98.9	68.3	89.2	74.5	81.8	+1.9	6.40	8.71	-1.91	6.46	12.67	-6.21	57.68	45.03
Aman	96.6	72.5	87.7	76.6	82.3	-0.3								

\* Degree not included.

† Dainton not included.

METEOROLOGICAL OFFICE, BENGAL,

C. LITTLE,

The 29th October 1895.

Offg. Meteorological Reporter to the Govt. of Bengal.















**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING, 8 A.M., SATURDAY,  
THE 26TH OF OCTOBER 1895.**

WEATHER during the week just past has again been fine and settled over the province, and, except at the close, over the Bay also. The chief features, viz., the absence of rainfall, the light northerly winds in all districts except Bihar, the rather warm days and comparatively cool nights, have all been maintained, as in the previous week. The rainfall was even more scanty, as none fell in Chota Nagpur and Lower Bengal, and a few scattered showers in North Bengal and Bihar give an average over these districts of only a hundredth of an inch. The heavier fall in Orissa was due to the disturbed weather in the south-west of the Bay. It was attended by heavy rainfall, which began in the extreme south and advanced slowly up the west coast of the Bay, reaching Ganjam and the south of Orissa at the end of the week.

The changes of pressure and of the other meteorological elements were of little importance in Bengal, there being only the usual small oscillations. Towards the end of the week a very slight fall of pressure in the north of the province led to readings being lower there than in the south; and this arrangement caused the southerly winds, which had hitherto prevailed in Bihar, to extend over North Bengal. As the change occurred at the time when the disturbance in the south of the Bay was giving unsettled weather over a wide area, it is impossible to say how far the increase of cloud in the northern districts was due to it. The probability is that it accelerated the change by a day or two. To whatever cause it was due the sky became overcast first in the north of the province, and afterwards cloudy weather with a good deal of rain became general in the southern districts.

The disturbance in the south-west of the Bay probably commenced too far south to affect the weather at any of the stations on the Madras coast, and as it moved rapidly, the stormy weather was only of short duration. Heavy rain began on the 22nd as far north as Madras, and continued on the 23rd, Cuddalore reporting nearly 8 inches on that day. Squally weather began on the 24th, but was not felt to the south of Madras, the severity of the storm being chiefly confined to the part of the coast between Nellore and Cocanada. Within little more than twenty-four hours after the squally weather began at Madras, the centre crossed the coast between Masulipatam and Nellore. On the morning of the 25th the centre appeared to be about due east of Madras and to be moving in a north-westerly direction. On that day heavy rain was reported from Nellore, and a moderate fall had occurred as far north as Masulipatam. On the 26th the centre was well inland, and weather was rapidly moderating. The heavy rainfall on the 26th was between Masulipatam and Gopalpur, and lighter amounts were reported from Puri and Cuttack.

There was a considerable increase in the strength of the wind in the north-west angle of the Bay and in South-West Bengal, but that was of little importance as compared with the heavy rain, which gradually advanced northwards and ultimately became fairly general in Orissa, Chota Nagpur, and South-West Bengal.

*Pressure.*—Readings have been practically normal throughout the week, changes having been very slow at all times. The mean difference from the normal is, as a rule, only a few thousandths of an inch.

*Temperature.*—As stated above, temperature conditions have been very similar to what prevailed during the previous week. Mean temperature has been high in Orissa and Chota Nagpur, almost normal in Bihar and South-West Bengal, and low in North and East Bengal and Assam, the difference varying from excess of  $1^{\circ}\cdot4$  in Chota Nagpur to defect of nearly  $2^{\circ}$  in Assam.

*Rainfall.*—Only a very few scattered showers have been reported, except from Orissa, towards the end of the week. None has fallen in Lower Bengal and Chota Nagpur, and only  $\cdot01$  inch on an average in the north of the province. The fall in Orissa is 6 inch, almost the whole of which fell on the 26th, the last day of the week.

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the week ending Saturday, the 26th of October 1895 :—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th October 1895.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
South-West Bengal	92.8	64.2	89.9	60.4	79.6	-0.3	Nil	0.87	-0.87	0.00	0.08	-0.98	2.44	4.11	0.08	1.46
North Bengal	88.1	65.8	86.0	68.6	77.3	-1.0	0.01	0.58	-0.57	0.00	0.61	-0.61	1.10	4.25	0.12	1.39
East Bengal	90.3	65.8	80.5	69.4	77.9	-1.4	Nil	1.05	-1.05	0.00	1.13	-1.13	5.35	5.15	Nil	1.62
Bihar	92.5	59.8	88.3	68.2	78.2	+0.1	0.01	0.52	-0.51	0.00	0.44	-0.44	0.41	2.20	0.01	0.76
Orissa	92.2	60.8	80.0	72.8	81.4	+0.9	0.60	1.54	-0.94	1.00	1.35	-0.35	3.32	5.65	0.60	2.00
Chota Nagpur	90.5	61.5	86.8	65.9	76.4	+1.4	Nil	0.51	-0.51	0.00	0.64	-0.64	0.60	2.51	Nil	0.65
Assam	89.5	64.0	84.9	67.5	76.3	-1.9										

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 29th October 1895.

C. LITTLE,  
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 20th to 26th October 1895.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.				Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.		
1895.		Inches.	°		°	°	°	°	Inches.	°	%	Inches.	
October	... 20th ...	29.928	81.7	91.5	10.7	71.8	85.6	76.5	.750	72.2	97	Nil	
"	... 21st ...	.913	82.2	91.6	18.8	72.8	86.6	76.5	.776	71.7	97	Nil	
"	... 22nd ...	.939	78.6	88.8	20.4	68.4	83.1	74.5	.608	70.2	87	Nil	
"	... 23rd ...	.920	80.0	90.1	20.3	69.8	85.1	75.5	.699	70.8	96	Nil	
"	... 24th ...	.913	79.6	89.8	20.4	69.4	85.9	70.0	.686	61.4	95	Nil	
"	... 25th ...	.938	80.1	89.3	18.5	70.8	84.6	72.6	.724	66.0	96	Nil	
"	... 26th ...	.972	78.1	84.4	12.6	71.8	84.1	76.5	.750	72.9	97	Nil	

The mean 10 A.M. pressure of the seven days ... .. 29.932  
Inches.

The mean temperature of the seven days ... .. 80.0  
°

The extreme variation of temperature ... .. 23.2  
°

The maximum temperature ... .. 89.4  
°

The mean 10 A.M. relative humidity of the seven days ... .. 95  
%

The total fall of rain from 20th to 26th October 1895 ... .. Nil  
Inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

METEOROLOGICAL OFFICE, INDIA,  
The 28th October 1895.

J. H. GILLILAND,  
For Meteorological Reporter to the Govt. of India.

## IRRIGATION DEPARTMENT,—BENGAL.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathi, Jalangi and Brahmaputra, for the month of September 1895.

RIVER GANGES.																								RIVER BHAGIRATHI.		RIVER JALANGI.		RIVER BRAHMAPUTRA.	
Mirzapur.		Benares.		Buxar.		Dinapore.		Monghyr.		Sahibganj.		Rampur Boalia.		Gaulundo.		Berhampore.		Sarengganj.		Gauthati.									
From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.		From Allahabad.									
Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.		Height over zero of gauge.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
1st	27.75	23.97	25.50	22.30	21.58	19.63	18.13	17.80	162.03	21.36	129.43	19.50	87.50	20.42	69.48	20.17	29.11	24.25	57.99	22.53	27.13	27.00	175.76						
2nd	28.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
3rd	28.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
4th	29.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
5th	29.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
6th	30.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
7th	30.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
8th	31.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
9th	31.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
10th	32.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
11th	32.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
12th	33.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
13th	33.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
14th	34.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
15th	34.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
16th	35.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
17th	35.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
18th	36.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
19th	36.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
20th	37.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
21st	37.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
22nd	38.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
23rd	38.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
24th	39.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
25th	39.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
26th	40.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
27th	40.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
28th	41.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
29th	41.75	23.97	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						
30th	42.25	23.47	27.83	22.60	23.08	18.63	18.13	17.80	163.43	21.88	128.68	19.75	87.75	20.42	69.48	20.05	29.02	24.00	57.74	22.75	27.05	26.30	175.06						

CALCUTTA,  
The 29th October 1895.O. C. LEECH,  
Under-Secretary to the Government of Bengal.



## CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 26th October 1895,  
as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 26TH OCTOBER 1895.			WEEK ENDING SATURDAY, THE 27TH OCTOBER 1894.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	657	87,650	1,488	464	45,327	588
Jute ...	626	2,01,175	3,442	391	96,450	1,655
Firewood ...	114	65,025	949	74	56,350	829
Other articles ...	886	1,93,020	2,774	746	178,213	2,698
Total ...	2,183	5,46,870	8,653	1,575	376,340	5,770

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

*Approximate Return of Traffic for week ended 12th October 1895 on 1,698.79 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
Total traffic for the week ...	224,514	Rs. 22,38,561 3 0	Mds. 31,89,883 30	Rs. 4,61,829 8 0	Rs. 15,651 2 0	Rs. 10,10,041 13 0	79,135	123,508	202,643
Or per mile of railway ...	...	129 4 0	...	...	...	...	...	...	...
For previous 13 <sup>th</sup> weeks of half-year ...	4,012,350	40,90,512 1 0	72,75,80,812 30	775,70,638 4 0	12,10,408 4 0	1,10,77,033 9 0	1,008,233	1,530,137	2,538,370
Total for 14 <sup>th</sup> weeks ...	4,236,864	44,20,073 4 0	4,07,70,896 10	42,31,862 12 0	2,30,139 6 0	1,20,83,075 6 0	1,277,373	1,653,645	2,931,018
COMPARISON.									
Total for corresponding week of previous year ...	283,884	3,15,453 3 0	30,00,223 0	4,21,679 6 1	10,441 11 4	8,10,613 5 2	78,183	94,641	172,824
Per mile of railway corresponding week of previous year ...	...	187 13 1	...	...	...	...	...	...	...
Total for corresponding 14 <sup>th</sup> weeks of previous year ...	4,361,574	42,03,255 4 0	4,09,40,777 0	54,04,234 14 9	2,40,579 15 9	1,20,87,070 2 6	1,139,180	1,641,054	2,780,234

- \* Deducted number of passengers 10,393 and Rs. 10,286 }  
 † Added Mds. 2,09,460 and deducted " 11,171 } on account of difference between the approximate and audited figures for the weeks ended 17th and 24th August 1895.  
 ‡ Ditto " 179 }  
 § Miles 2,953<sup>1</sup>/<sub>2</sub> added to coaching and 4,504<sup>1</sup>/<sub>2</sub> deducted from merchandise on account of difference between the approximate and audited figures from week ended 24th August to 21st September 1895.  
 e The increase is due to pilgrims and running of extra troop and mail special trains.

## EAST INDIAN RAILWAY.

*Approximate Return of Traffic for the week ended 19th October 1895, on 1,698.79 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
Total traffic for the week ...	222,537	Rs. 22,38,561 3 0	Mds. 31,89,883 30	Rs. 4,61,829 8 0	Rs. 15,651 2 0	Rs. 10,10,041 13 0	83,739	120,964	204,703
Or per mile of railway ...	...	130 11 1	...	...	...	...	...	...	...
For previous 14 <sup>th</sup> weeks of half-year ...	4,204,089	44,08,344 4 0	74,11,09,780 10	723,61,627 12 0	12,20,575 6 0	1,10,30,080 6 0	1,177,373	1,653,045	2,830,418
Total for 15 <sup>th</sup> weeks ...	4,426,626	47,70,194 4 0	4,45,82,108 10	42,30,622 12 0	2,40,579 6 0	1,20,86,103 6 0	1,200,103	1,754,029	2,954,132
COMPARISON.									
Total for corresponding week of previous year ...	281,223	3,31,010 6 7	31,83,494 30	4,27,125 12 2	10,261 5 9	10,14,567 8 6	77,442	112,407	189,849
Per mile of railway corresponding week of previous year ...	...	195 15 7	...	...	...	...	...	...	...
Total for corresponding 15 <sup>th</sup> weeks of previous year ...	4,542,679	45,34,265 10 7	4,41,04,571 30	50,71,480 10 11	2,65,941 5 6	1,20,71,627 11 0	1,216,022	1,754,029	2,970,051

- \* Added No. of passengers 7,075 and Rs. 17,171 }  
 † Ditto Mds. 2,38,454 and " 9,605 } on account of difference between the approximate and audited figures for the week ended 21st August 1895.  
 ‡ Ditto " 539 }

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 12th October 1895, on 22.28 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	20,578	Rs. A. P. 5,185 9 0	Mds. S. 3,165 0	Rs. A. P. 361 11 0	Rs. A. P. 10 0 0	Rs. A. P. 5,557 4 0	1,150	54	1,210
per mile of railway ...	.....	253 4 4	.....	16 4 4	0 7 2	249 15 10	.....	.....	.....
for previous 154 weeks of half-year ...	272,194	64,717 0 0	105,639 0	2,715 12 0	2157 0 0	67,589 12 0	15,003	774	15,777
Total for 154 weeks ...	292,766	69,902 9 0	73,844 0	3,077 7 0	167 0 0	73,147 0 0	16,759	828	17,587
COMPARISON.									
Total for corresponding week of previous year ...	19,807	4,924 0 0	4,093 0	130 6 6	7 8 0	5,100 14 6	823	33	856
per mile of railway corresponding week of previous year ...	.....	221 8 0	.....	7 9 11	0 5 5	239 7 4	.....	.....	.....
Total for corresponding 154 weeks of previous year ...	252,764	63,079 9 4	1,17,813 10	4,850 4 0	136 3 6	71,066 0 10	16,802	963	17,765

\* Deducted number of passengers 840 and Rs. 404

+ Added maunds 1,150

Deducted

} on account of difference between the approximate and audited figures for the weeks ended 17th and 24th August 1895.

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for the week ended 19th October 1895, on 23.23 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	17,443	Rs. A. P. 4,103 10 0	Mds. S. 3,473 20	Rs. A. P. 349 6 0	Rs. A. P. 12 0 0	Rs. A. P. 4,523 0 0	1,153	33	1,186
per mile of railway ...	.....	187 6 11	.....	15 11 5	0 8 8	203 11 0	.....	.....	.....
for previous 154 weeks of half-year ...	232,953	69,900 9 0	174,170 0	13,086 7 0	2166 0 0	73,156 0 0	16,739	823	17,562
Total for 154 weeks ...	310,396	74,067 3 0	33,643 20	3,434 13 0	180 0 0	77,632 0 0	17,914	861	18,775
COMPARISON.									
Total for corresponding week of previous year ...	17,675	4,313 6 4	11,430 10	437 4 0	9 2 6	4,749 13 10	1,107	303	1,410
per mile of railway corresponding week of previous year ...	.....	194 0 7	.....	19 3 6	0 6 7	213 10 8	.....	.....	.....
Total for corresponding 154 weeks of previous year ...	280,439	70,992 15 8	1,29,353 20	5,277 8 0	145 6 0	76,415 13 8	17,909	1,166	19,075

Added number of passengers 187 and deducted Rs. 3

Ditto maunds 326 and

Ditto

} on account of difference between the approximate and audited figures for the week ended 31st August 1895.

## DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 12th October 1895, on 161.40 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week ...	10,806	Rs. A. P. 25,754 6 0	Mds. S. 77,831 0	Rs. A. P. 10,630 3 0	Rs. A. P. 20 0 0	Rs. A. P. 26,013 9 0	7,533	4,999	12,532
per mile of railway ...	.....	169 9 1	.....	67 1 8	0 3 10	326 14 7	.....	.....	.....
for previous 154 weeks of half-year ...	1276,718	12,01,297 1 0	11,96,164 20	11,39,936 10 0	5493 0 0	3,97,708 11 0	90,144	30,846	129,990
Total for 154 weeks ...	296,604	2,27,061 7 0	12,14,633 20	1,35,815 13 0	555 0 0	3,64,392 4 0	97,677	44,743	142,420
COMPARISON.									
Total for corresponding week of previous year ...	10,614	17,594 15 3	53,416 0	5,939 7 0	54 5 9	23,518 11 11	7,480	3,464	10,944
per mile of railway corresponding week of previous year ...	.....	106 9 3	.....	35 6 2	0 5 5	164 4 10	.....	.....	.....
Total for corresponding 154 weeks of previous year ...	273,419	2,13,000 11 0	9,44,181 20	1,23,336 3 3	864 11 3	3,41,187 10 8	87,696	46,550	134,246

The increase is due to running of extra troop and mules special trains.

Added No. of passengers 86 and deducted

Rs. Mds. 1,576 and

Do.

} on account of difference between the approximate and audited figures for the weeks ended 17th and 24th August 1895.

## DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for the week ended 19th October 1895, on 161.40 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	16,018	17,488 0 0	81,088 10	11,221 12 0	47 0 0	28,756 12 0	6,300	5,258	11,558
Or per mile of railway ...	.....	108 5 8	.....	69 8 5	0 4 8	178 2 9	.....	.....	.....
For previous 14 <sup>th</sup> weeks of half-year ...	*285,887	*2,20,037 7 0	†11,83,006 20	†1,35,406 13 0	‡550 0 0	3,61,994 4 0	97,677	44,743	142,420
Total for 15 <sup>th</sup> weeks ...	311,905	2,43,525 7 0	12,74,888 30	1,46,028 9 0	507 0 0	3,90,751 0 0	104,037	50,001	154,038
COMPARISON.									
Total for corresponding week of previous year ...	17,725†	17,523 5 0	90,541 30	10,330 1 0	55 2 0	27,908 8 0	6,693	3,450	10,143
Per mile of railway corresponding week of previous year ...	.....	108 9 2	.....	64 0 0	0 5 6	172 14 8	.....	.....	.....
Total for corresponding 16 weeks of previous year ...	291,139	2,31,490 0 9	10,34,723 20	1,30,650 4 8	919 13 3	3,69,066 2 8	94,323	52,009	146,332

\* Deducted number of passengers 717 and Rs. 1,014  
† Ditto maunds 21,023 and " 1,409 } on account of difference between the approximate and audited figures for the week ended 31st August 1895.  
‡ Added " 25

## EASTERN BENGAL STATE RAILWAY

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic and Mileage for the week ended 19th October 1895, on 813 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	105,400	98,440 0 0	10,10,290 0	2,68,510 0 0	11,860 0 0	3,79,810 0 0	28,520	45,793	74,313
Or per mile of railway ...	204	121 0 0	1,243 0	330 0 0	2 0 0	463 0 0	.....	.....	.....
For previous 15 weeks of half-year ...	2,700,077	12,23,957 0 0	1,20,78,083 0	27,48,260 0 0	1,04,001 0 0	*41,60,127 0 0	440,443	500,263	940,706
Total for 16 weeks ...	2,805,507	13,22,397 0 0	1,30,88,373 0	30,16,779 0 0	2,05,301 0 0	45,45,937 0 0	468,963	545,983	1,014,946
COMPARISON.									
Total for corresponding week of previous year ...	163,392	85,082 0 0	9,57,075 0	2,13,831 0 0	18,001 0 0	3,16,914 0 0	27,335	42,435	69,770
Per mile of railway corresponding week of previous year ...	207	105 0 0	1,178 0	263 0 0	3 0 0	371 0 0	.....	.....	.....
Total to corresponding date of previous year ...	2,747,510	12,32,478 0 0	1,42,94,560 0	20,40,168 0 0	2,66,568 0 0	44,46,314 0 0	458,586	567,599	1,026,185

\* Audited up to 31st August 1895.  
† Excluding steamer earnings.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 19th October 1895, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	25,050	9,000 0 0	1,13,250 0	10,880 0 0	200 0 0	21,040 0 0	3,756	3,892	7,648
Or per mile of railway ...	208	80 0 0	906 0	87 0 0	1 0 0	168 0 0	.....	.....	.....
For previous 15 weeks of half-year ...	469,400	1,64,505 0 0	9,88,057 0	93,753 0 0	2,634 0 0	2,51,153 0 0	56,799	40,909	97,708
Total for 16 weeks ...	495,356	1,64,525 0 0	11,01,307 0	1,04,633 0 0	3,034 0 0	2,73,192 0 0	60,554	44,591	105,145
COMPARISON.									
Total for corresponding week of previous year ...	25,058	8,537 0 0	57,053 0	4,426 0 0	442 0 0	13,411 0 0	3,756	2,276	6,032
Per mile of railway corresponding week of previous year ...	208	68 0 0	456 0	35 0 0	4 0 0	107 0 0	.....	.....	.....
Total to corresponding date of previous year ...	473,448	1,51,132 0 0	9,21,000 0	87,548 0 0	2,795 0 0	2,63,475 0 0	58,995	37,419	96,414

\* Audited up to 31st August 1895.





# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, NOVEMBER, 6, 1895.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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## RESOLUTION ON THE REPORT ON EXCISE ADMINISTRATION IN THE LOWER PROVINCES FOR 1894-95.

### FINANCIAL DEPARTMENT—SEPARATE REVENUE.

*Darjeeling, the 28th October 1895.*

#### RESOLUTION—No. 720T.—F.

READ—

The Report of the Commissioner of Excise for the year 1894-95, with the observations of the Board of Revenue.

Mr. Krishna Govinda Gupta was Excise Commissioner throughout the year. He had immediately under him three Deputy Collectors—one as his Personal Assistant and two as Inspectors of Excise—whose chief duty was to travel about and assist the Excise Commissioner in inspections of all kinds. In 18 districts, 14 of which have central distilleries, Special Deputy Collectors were employed exclusively on excise work, and their pay was debited to the Department, while in 25 districts ordinary Deputy Collectors were in charge of excise in addition to their regular duties. Nine Sub-Deputy Collectors and 27 kanungoes were employed as Superintendents and Deputy



Superintendents of the 31 distilleries open during the year, but owing to the closing of the Pakour distillery, the number has since been reduced by one. In future reports it should be stated which distilleries are in charge of Sub-Deputy Collectors; and these officers should only be appointed to the largest and most important distilleries. In the executive branch of the subordinate establishment, one appointment was abolished during the year, and two have been abolished since its close, bringing the numbers in this branch down to 201 on salaries ranging from Rs. 20 to Rs. 400. The old excise darogas are gradually being replaced by Sub-Inspectors who know English, and some of the men newly appointed are graduates of the University. Two clerks were added to the office branch, which includes 141 men, owing to the opening of liquor depôts at Vishnupur in Bankura and at Pirojpur in Backergunge. Some delay occurred in the submission to the Board of the Excise Commissioner's report owing to several District Officers not sending in their reports and returns punctually, and, no return at all having been received from the Deputy Commissioner of Angul, the Board authorised the Commissioner to omit the figures relating to that district from the statistics attached to the Report. The omission, which would have left the Provincial statistics for the year incomplete and would further have affected the accuracy of comparisons drawn in future years, has been supplied under the Lieutenant-Governor's orders, and the figures quoted in the Resolution differ to this extent from those given in the Report.

2. *Inspections.*—A sufficient amount of inspection was done by the Commissioner and the Inspectors of Excise, but in future every district and distillery should be inspected at least once during the year by the Excise Commissioner himself or one of his Inspectors, and the inspections made by Commissioners and District Officers should be reported. In Faridpur, Darbhanga, Patna, Bhagalpur, and Shahabad, it is stated that the central distilleries were insufficiently inspected by the Collectors, while in other districts the sadar excise office, the ganja golas, &c., were not inspected as often as the rules require. Fuller particulars should in future be given on these points, and the names of officers who disregard the standing orders on the subject should be reported. For Special Deputy Collectors the minimum number of days fixed for touring was raised from 120 to 150, and orders were issued directing that these officers were not to be employed on judicial work or placed in charge of treasuries. It is satisfactory to find that with a few trifling exceptions, these orders were everywhere observed. The prescribed standard of touring, however, was only attained in twelve districts out of eighteen. In Monghyr Babu Surendra Nath Mazumdar did no touring at all during the period of nearly three months for which he held charge; Munshi Dumri Lal of Darbhanga was out for only 35 days in seven months, and Babus Rakhal Das Chatterji (Muzaffarpur) and Bhabataran Chatterji (Gaya) did not travel as much as they should have done. For Deputy Collectors of the ordinary staff who are employed on excise work, the minimum period of touring was extended from 60 to 90 days, and they were exempted from being placed in charge of treasuries. In 15 districts out of 25, the prescribed amount of touring was done, and in three the deficiency was trifling. The short tours made in Nadia and Malda are attributed to constant changes of the excise officers, and it should be an object to avoid these in future. In Chittagong judicial work interfered with the proper performance of the Deputy Collector's excise duties; and in Jalpaiguri the excise work was given to the Deputy Collector who held charge during the touring season of the current duties of the district office—an arrangement which should not be repeated. The insufficient touring done in Dinajpur is explained by the ill-health of two officers, and by the fact that the Collector himself did most of the excise inspections during the cold weather. The Excise Commissioner complains that the efficiency of his Department is impaired by reason of Deputy Collectors reverting to the regular line after they have gained experience of excise work. So long as existing arrangements continue, this is a result which must be accepted as unavoidable; and as the term of service in the Excise Department is fixed at three years, six of the 18 Special Deputy Collectors employed exclusively on excise duties must on the average revert to regular administrative work every year.

3. *Revenue and charges.*—The following statement shows the gross excise revenue, the charges, and the net revenue for the last five years:—

Period.	Revenue.	Charges.	Net revenue.	Percentage of charges.
1	2	3	4	5
	Rs.	Rs.	Rs.	
1890-91 ... ..	1,04,60,932	6,47,112	98,13,820	6.1
1891-92 ... ..	1,11,29,813	6,67,792	1,04,62,021	6.
1892-93 ... ..	1,16,00,621	6,53,715	1,09,46,906	5.6
1893-94 ... ..	1,21,37,864	6,47,740	1,14,90,124	5.3
1894-95 ... ..	1,25,71,971	6,37,793	1,19,34,178	5.07
Difference of the past two years.	+ 4,34,107	—9,947	+ 4,44,054	—23

In order to get the true figure for the net Provincial Revenue derived from Excise, we must add to the charges as here given Rs. 11,051 on account of refunds, and Rs. 8,872 for the difference between fines collected and rewards distributed. This raises the amount expended to Rs. 6,57,716, and lowers the net revenue to Rs. 1,19,14,255. These departmental figures, it should be noted, do not agree absolutely with those of the Accounts Department, which show the receipts to be less by Rs. 9,621 and the charges Rs. 3,458 less, thus reducing the net revenue shown in the table above by Rs. 6,163. Greater efforts should be made in future to obtain agreement between the figures of the Excise Department and those of the Accountant-General.

Since the decline in the years 1889-91, consequent on the extension of the distillery system and the abolition of outstills in certain districts, the recovery of the excise revenue has been rapid and continuous. During the past year the gross revenue rose from Rs. 1,21,37,864 to Rs. 1,25,71,971, while the charges fell from Rs. 6,47,740 to Rs. 6,37,793, and the net revenue shows an increase of Rs. 4,44,054 on that of the previous year. At the same time the total number of licenses sanctioned under all heads, excepting tari, poppy-heads, and druggists' licenses for opium, fell from 11,145 to 11,046, and the number of licenses actually settled from 10,896 to 9,377. Nearly three-fourths of the increase in receipts occurred under the head of country-spirits, and there was also a substantial rise under opium (Rs. 78,713), imported liquors (Rs. 48,426), and pachwai (Rs. 35,818). The revenue from ganja declined by Rs. 42,290, and that from tari by Rs. 18,870, and minor decreases occurred under the heads of rum and siddhi. The reduction of Rs. 9,947 in charges is distributed over a number of heads, the largest items of decrease being Rs. 10,155 under rewards and Rs. 11,114 under petty construction, while the charges for travelling allowance rose by Rs. 10,748, and for petty repairs by Rs. 5,614.

4. *Revenue by Divisions.*—Distributed according to Divisions, the gross receipts for the last five years are shown thus:—

DIVISION.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1894-95 COMPARED WITH 1893-94.	
						Increase.	Decrease.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Burdwan ... ..	10,58,793	11,53,437	11,55,147	11,72,792*	12,32,366	59,664	.....
Presidency ... ..	30,35,974	31,16,723	33,57,061	34,40,010*	36,15,303	1,74,396	.....
Bajshahi ... ..	8,31,874	8,47,451	8,87,540	9,48,582*	10,00,540	51,958	.....
Dacca ... ..	8,13,876	8,19,122	8,13,103	8,08,634*	8,21,166	11,532	.....
Chittagong ... ..	2,29,266	2,55,798	2,79,670	2,67,559*	2,48,837	21,278	.....
Patna ... ..	21,14,365	23,47,428	24,01,188	26,33,418*	26,30,784	5,338	.....
Rhagelpur ... ..	12,10,687	12,32,353	12,17,047	13,36,637*	14,02,891	66,244	.....
Orissa ... ..	5,05,077	5,51,459	5,69,131	6,19,873	6,87,436	.....	32,467
Chota Nagpur ... ..	6,71,628	7,09,042	8,39,285	9,08,503*	9,56,629	78,126	.....
Total ... ..	1,04,60,932	1,11,29,813	1,16,00,621	1,21,37,864	1,25,71,971	4,34,107	32,457
					Net increase ...	4,34,107	

\* Revised figures.

The Presidency and Patna Divisions, which between them make up about half the revenue of the Province, contribute in very different proportions to the increase realised during the past year, the former showing a rise of Rs. 1,74,386, while in Patna the revenue was nearly stationary. The Chota Nagpur Division has the next highest increase to that of the Presidency, and Orissa shows a decline of Rs. 32,437.

5. *Revenue and consumption.*—The relation of the growth of consumption to the growth of revenue is illustrated by the following statistics of four chief articles of excise:—

	Revenue.		Percentage of difference.	Consumption.		Percentage of difference.
	1893-94.	1894-95.		1893-94.	1894-95.	
1	2	3	4	5	6	7
	Ra.	Ra.		L. P. Gal.	L. P. Gal.	
Distillery liquor ...	24,45,174	25,61,538	+4·7	416,938	455,595	+9·2
Outstill shops ...	28,07,724	30,04,100	+7·	.....	.....	.....
Country rum ...	4,35,308	4,32,227	-7	83,554	83,624	0
				Mds.	Mds.	
Opium ...	21,34,867	22,13,746	+3·6	1,973	2,042	+3·5
Ganja ...	25,35,045	24,92,755	-1·6	5,116	4,828	-5·6

The fact that the consumption of distillery liquor increased more rapidly than the revenue is a consequence mainly of the reduction of duty in the Patna Division, and the change in the method of levying distillery fees. Both of these measures were adopted with the express object of lightening the taxation on distillery spirits, and of enabling it to hold its ground, within the area supplied from distilleries, against the cheap liquor produced at the outstills of the neighbourhood. The increased consumption of distillery spirit is therefore not necessarily an indication of the spread of drunkenness, but merely tends to show that illicit liquor is less largely resorted to; while at the same time the increase of revenue bears a slightly higher proportion to the increase of consumption than was the case last year. In the case of opium and ganja the difference in the ratios of revenue and consumption, though less marked than in 1893-94, is still somewhat in favour of the former.

6. *Sources of Revenue.*—In the following statement the gross excise revenue of the last five years is classified according to the articles from which it is derived:—

ARTICLES OF EXCISE.	REVENUE.					1894-95 COMPARED WITH 1893-94.	
	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	Increase.	Decrease.
1	2	3	4	5	6	7	8
	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.
Country-spirits ...	45,28,202	46,14,643	50,30,143	52,52,808	55,05,038	3,12,740	.....
Rum ...	98,383	2,20,973	4,19,717	4,35,308	4,32,227	.....	3,081
Imported liquors ...	3,31,095	2,23,044	2,07,032	2,33,168	2,81,688	48,420	.....
Beer ...	71	174	183	224	538	314	.....
Tari ...	8,45,586	9,57,405	9,50,379	10,16,375	9,07,851	.....	18,524
Pachwai ...	2,72,248	3,04,168	3,34,557	3,40,518	3,82,336	35,819	.....
Charas ...	6,594	7,508	9,097	10,776	16,888	6,112	.....
Siddhi, sabzi, or bhang	44,847	44,404	53,553	55,752	55,394	.....	358
Majum ...	1,010	1,092	1,064	2,000	2,119	50	.....
Madak ...	81,467	86,348	79,080	78,579	80,409	11,030	.....
Chandu ...	36,267	35,333	31,032	24,476	29,024	5,144	.....
Spirits used for arts ...	466	772	1,086	337	390	63	.....
Ganja ...	23,11,713	22,92,588	23,66,486	25,35,045	24,92,755	.....	42,290
Opium ...	19,95,312	21,18,825	20,83,835	21,34,867	22,13,746	78,879	.....
Miscellaneous ...	8,671	7,973	10,413	11,676	12,468	790	.....
Total ...	1,04,60,033	1,11,29,613	1,16,00,031	1,21,37,564	1,25,71,971	4,34,407	64,253
					Increase ...	4,34,107	

The receipts from country-spirits, which make up 44·3 per cent. of the excise revenue, have advanced steadily throughout the period. Ganja and

its varieties, which in 1893-94 yielded 22·29 per cent. of the revenue, now contribute only 21·4. Opium and its preparations (18·5 per cent.) hold their ground, and show a slight increase since last year. Tari fell off slightly during the last year, but still contributes nearly 8 per cent. to the total revenue. Rum (3·4 per cent.) shows a small decline; and pachwai (2·4 per cent.) an increase of 10·3 per cent. The revenue from imported liquors rose by Rs. 48,426, or 20·8 per cent., and now bears a proportion of 2·2 (against 1·9 last year) to the total excise revenue. Calculated on the population ascertained in the Census of 1891, the average incidence of the excise revenue was 2 annas and 10 pies per head, against 2 annas and 8 pies in 1893-94, while during the latter year the incidence in Bombay was 8 annas and 4 pies, and in Madras 5 annas and 10 pies. No allowance, however, has been made in this calculation for the natural increase of population, which is estimated to be 7 per thousand per annum, so that the true incidence is somewhat less than is here stated. The settlements for the current year show an increase in every Division except the Presidency, the total advance on last year's results being Rs. 3,95,403.

7. *Country-spirit*.—Map No. II, annexed to the report, illustrates the incidence of revenue from country-spirits on population, or, in other words, the comparative popularity of country liquor in different parts of the Province. Throughout a huge tract of country extending from Shahabad on the west to Monghyr on the east, and stretching southward so as to include the whole of Manbhum and Lohardaga, every ten persons contribute a rupee to the revenue. Singhbhum on the south and Saran and Champaran adjoin this tract, and pay a rupee per ten to twenty persons; while on the north-east, Bhagalpur, Purnea, and Malda attain the same standard, and adjoin Jalpaiguri and Darjeeling, where the maximum rate of consumption prevails. On the south-east, again, Burdwan and the 24-Parganas show an incidence of one rupee to twenty persons, and Hooghly an incidence of a rupee to ten. Speaking generally, it may be said that a line drawn from Calcutta to Darjeeling marks off the areas of maximum and minimum consumption of country liquor; the minimum prevailing on the east and the maximum on the west. There are of course exceptions to this rule. Thus on the west of the line, the consumption of Orissa is at the rate of a rupee to 50 persons and over; Birbhum and Bankura yield a rupee per 40 to 50; Midnapore and Darbhanga a rupee per 30 to 40; and Muzaffarpur, Howrah, and the Sonthal Parganas a rupee for every 20 to 30. On the east of the line, again, the districts of Jalpaiguri and part of Darjeeling are areas of maximum consumption; but Jessore, Rangpur, Faridpur, Backergunge, Tippera, Noakhali, and Chittagong have the minimum incidence. Khulna and Mymensingh closely approach the same standard, and Nadia, Murshidabad, Rajshahi, Pabna, and Dacca have an incidence of only one rupee per 30 to 40 persons. Dinajpur and Bogra alone rise to the scale of a rupee per 20 to 30 of population, and the higher rates which prevail so largely on the west of the line are practically unknown to the east. If Orissa be excluded from the comparison, it is clear that the area where the least country-spirit is drunk corresponds substantially with the tract in which Muhammadans form from 45 to 80 per cent. of the population recorded at the last Census, and it can hardly be doubted that their habits and traditions account for the fact that that area shows the minimum consumption of country liquor and the maximum or nearly the maximum consumption of ganja and opium. Even to this, however, there are notable exceptions, so far at any rate as drugs are concerned, for Noakhali pays less ganja revenue than any district in the Province, and Faridpur, Tippera, and Noakhali show the minimum consumption of opium. In Orissa the place of country liquor is supplied by opium, to which in Puri is added a substantial proportion of ganja.

8. The revenue from country-spirit rose from Rs. 52,52,898 in 1893-94 to Rs. 55,65,638 in the past year, being an increase of Rs. 3,12,740, or 5·9 per cent. Of the total revenue raised, Rs. 30,04,100 were contributed by outstills and Rs. 25,61,538 by distillery spirits, the latter under the three heads of license fees (Rs. 8,06,044), still-head duty (Rs. 16,98,842), and distillery fees (Rs. 56,852). The income from outstills rose by Rs. 1,96,376, and that from distillery liquor by Rs. 1,16,364. The statistics of licenses show



that the number of outstills sanctioned rose from 2,066 in 1893-94 to 2,096 in the year under review, and the number settled from 2,059 to 2,088, while the number of shops sanctioned for the sale of distillery spirits fell from 1,292 to 1,237, and the number settled from 1,255 to 1,217. In the case of outstills, however, the increase is only apparent. Up to last year the licensees of outstills in some districts were allowed to open branch shops without taking separate licenses for them. These shops bore no number, and were not separately shown in the returns. During the past year 23 such shops have either been converted into independent outstills, or have been retained as branch shops bearing separate numbers, while 11 branch shops in Muzaffarpur have been closed. The net result of these changes was a reduction of four in the number of outstills sanctioned and of five in the number actually settled. All the districts of the Burdwan Division show an increase of revenue, with the exception of Howrah, where the decline was nominal. The existence of illicit distillation in Bankura and parts of Hooghly had been suspected for some time, and in order to check this the duty in Bankura was reduced from Rs. 2-8 to Rs. 2 per gallon London-proof, and in the Jahanabad subdivision of Hooghly from Rs. 4 to Rs. 2, while at the same time a special preventive establishment was sanctioned. Good results are said to have been attained, and the sales of distillery liquor in Jahanabad are stated to have increased. As, however, the duty in the surrounding area is Rs. 5 a gallon, there is a danger of the cheaper liquor being smuggled into this tract, and the working of the new arrangements should therefore be carefully watched. In the Presidency Division there was an increase of nearly Rs. 86,000 in revenue, of which Rs. 73,844 was contributed by Calcutta, and of more than 17,000 gallons in consumption, of which Calcutta accounted for 13,609 gallons. The Dacca Division shows a decline of nearly Rs. 20,000 in revenue, the fall being highest in Dacca and Mymensingh and lowest in Faridpur and Backergunge. In the first two districts, however, the fall is said to be nominal, being due to the issue of separate licenses for the sale of imported liquor, the receipts from which show a corresponding increase. In Faridpur scarcity and a change in the licensing system, and in Backergunge the taste for country-made Eau-de-Cologne, are said to have affected the revenue from country liquor, but Faridpur also shows a small set-off under the head of imported spirits. There was a slight fall of revenue in the Chittagong Division, where the outstill system is in force, owing, it is said, to apprehensions of scarcity in Tippera. In the area under the dual system of central distilleries supplemented by outstills, comprising the districts of the Patna Division, Monghyr, Bhagalpur, and Hazaribagh, the revenue from country-spirit rose from Rs. 15,97,272 to Rs. 16,69,448, being an increase of Rs. 72,176, to which all districts contributed except Bhagalpur. Within the same area the distillery revenue rose from Rs. 3,82,401 to Rs. 4,16,647, the increase being largest in Monghyr, where it is put down to general prosperity, and in Saran and Gaya, owing to the reduced yield of the palm trees from which *tari* is derived and the popularity of the weak *khasia* liquor now issued from the distilleries. The Lieutenant-Governor is glad to see this good result of the policy which he has all along strongly advocated. He upholds the central distillery system, but only on the condition, which has only now at length been complied with, that it does not force into consumption stronger liquor than the people are accustomed to drink. The Orissa Division with distilleries everywhere, except in the wilder tracts of Cuttack, shows a small decline of revenue, while the Chota Nagpur Division, which has a small distillery area near Giridhi, had an increase of Rs. 76,808.

9. *Changes in management of Central Distilleries and Outstills.*—Nothing is said in the Report or in the Board's review about the effect of the substitution of a distillery fee of  $2\frac{1}{2}$  annas per gallon London-proof for the former fee of an anna per gallon irrespective of strength, but the figures in table V show that notwithstanding a rise of 16,401 London-proof gallons in the consumption of distillery liquor in the Patna Division, the revenue from this source fell from Rs. 23,188 to Rs. 19,693, and it may be inferred that the change has removed an artificial restriction which tended to induce the abkars to produce stronger drink than they would otherwise have done. The system of levying duty on certain fixed strengths which are multiples of 5°, so that where the actual



strength falls between two of such multiples, duty is charged on the higher, has been introduced everywhere except in a few districts, where duty is levied on the actual strength. Under the head of outstills the only change effected was the regulation of branch shops and the reduction of their numbers already referred to. The restrictions on vat and still capacities originally proposed by the Excise Commission of 1884 had been withdrawn during 1893-94, on the ground that it was impossible to enforce them. No evil results appear to have followed, and the change is reported to have relieved the distillers from the liability to harassment, and to have tended to raise the fees for licenses.

10. *Country rum.*—The supply of country rum has hitherto been derived from Sibpur near Howrah, from Shajahanpur in the North-Western Provinces, and from Aska and Arcot in Madras. During the past year a new distillery was opened in Darbhanga in connexion with the sugar refinery at Sakri in that district. The revenue from rum fell from Rs. 4,35,308 to Rs. 4,32,227, the decrease of Rs. 3,081 being due partly to the rum imported under bond being slightly weaker than in the preceding year, and partly to a nominal decline under license fees. The number of licenses sanctioned was 16, all of which were settled, the corresponding figure for last year being 15. The total quantity of rum passing into consumption during the past year was 83,624 gallons London-proof (63,285 gross gallons), against 83,554 gallons London-proof (62,066 gross gallons) in the previous year. The bulk of the trade in country rum is done through Calcutta, and the following statement illustrates the great development that it has undergone since 1888-89:—

*Imports of rum into Calcutta.*

Year.	Albion rum.	Shajahanpur rum.	Madras rum.	Sakri rum.	Total.	Duty.
1	2	3	4	5	6	7
	Gross gallons.	Gross gallons.	Gross gallons.	Gross gallons.	Gross gallons.	Rs.
1888-89	9,168	15,150	.....	.....	24,318	50,408
1889-90	15,446	28,770	319	.....	44,535	78,940
1890-91	4,417	27,340	9,360	.....	41,117	73,871
1891-92	16,755	42,790	17,184	.....	76,729	2,05,601
1892-93	9,386	35,799	14,597	.....	59,782	3,97,951
1893-94	16,780	32,826	11,410	...	61,016	4,13,734
1894-95	13,377	32,643	12,134	3,518	61,672	4,11,696

During the period covered by this statement the total imports have increased nearly three-fold and the revenue eight-fold, the latter result being due to the introduction in 1892-93 of the practice of importation under bond, which is found to be more convenient to the trade. In Calcutta and its neighbourhood rum is drunk mainly by up-country people and labourers in the mills; and the remarkable growth of the demand has not interfered with the consumption of country liquor. During the past year 61,672 gross gallons were imported into Calcutta at a strength of 32° over-proof, of which 14,754 gallons were exported after being diluted to 20° under-proof, or 24,345 gross gallons. The amount consumed in Calcutta itself may therefore be taken to be 46,918 gallons at 32° over-proof, or 77,415 gallons at 20° under-proof, the strength at which rum is usually sold. The export of rum from Calcutta to the mufassal districts of Bengal rose from 7,092 gross gallons in 1893-94 to 12,537 gallons during the past year, the chief demand being from Dacca (3,871), Darjeeling (2,005), 24-Parganas (1,245), Mymensingh (720), Faridpur (702), and Jalpaiguri (632). There was also a direct import of 1,613 gross gallons from Shajahanpur into districts other than Calcutta. The exports to Assam rose from 6,222 gross gallons to 11,468 gross gallons during the year, and these, taken with the exports to Bengal mufassal districts, make up nearly the whole of the exports from Calcutta referred to above.

11. *Imported liquor*.—The revenue from this source, which consists exclusively of fees for wholesale and retail licenses, rose from Rs. 2,33,162 to Rs. 2,81,588. The total number of licenses sanctioned rose from 680 to 707, and of licenses settled from 639 to 700. The number of wholesale licenses was reduced by 2, and that of hotel licenses increased by 2, while the number of retail licenses rose by 61. This, however, was only due to the abolition of the practice of issuing combined licenses for the sale of country-spirits and imported liquor. Of the net increase of Rs. 48,426 in revenue, Rs. 14,410 occurred in Dacca, Rs. 12,858 in Mymensingh, and Rs. 6,241 in the 24-Parganas. The decline of Rs. 2,038 in Calcutta is apparent only. It is satisfactory to observe that the increase in the rate of fees sanctioned in Calcutta in 1892-93 has worked well, and the revenue has risen since that year by Rs. 28,404, while within the same period there has been a marked decrease in the number of retail licenses. Attempts were made to check the traffic in cheap German spirit, mostly distilled from potatoes, which is coloured and flavoured locally and sold under fancy names as brandy, whisky, port or sherry, by requiring every bottle to bear a label showing where the contents had been manufactured and bottled. The dealers in these concoctions evaded the rule by printing the prescribed particulars in type so small as to be illegible, and revised orders were issued which could not be fully enforced during the year. Neither the Excise Commissioner nor the Board appear to expect much result from their efforts to let the public know the true character of the stuff some of them drink, and it is clear that so long as people are willing to buy spirits at Rs. 9 a dozen, without caring to ask what they are made of, there will be no lack of unscrupulous dealers to meet this demand.

12. *Tari*.—The revenue derived from the sap of palmyra and date trees fell during the year from Rs. 10,16,375 to Rs. 9,97,851, being a decline of Rs. 18,524, or 1·8 per cent. The increase of 329 in the number of licenses issued was due to a rise in the number of licenses for the sale of unfermented tari, which is not an intoxicant. The decline was heaviest (Rs. 22,156) in the Patna Division, which yields more than half of the tari revenue collected in the Province, and every district except Patna and Champaran showed a marked falling off, which is attributed by the Excise Commissioner to unfavourable climatic conditions, which caused a reduction in the yield of the trees. Unseasonable rain during the hot weather of 1894 is said to have led to the growth of a worm which destroyed the spadices of the palmyra trees, while the excessive cold of the autumn and winter caused the blossoms to wither. The Board think that the tari revenue was also affected by the reduction of taxation on country spirits in the Patna Division, and by the attempts made to introduce the Madras practice of taxing tari by means of a fee on each tree tapped, which were continued during the year without conspicuous success. The subject has since been fully reported on by Babu Abhilash Chandra Mukerji, 2nd Inspector of Excise, who was deputed to Madras for the purpose, and the Board have been instructed to introduce the tree-tax system into certain selected districts as soon as the law has been amended, so as to prohibit the tapping of trees without license. With reference to the inquiry made in the Resolution on last year's report, as to the relative alcoholic strength of tari and country-spirit, the Board explain that owing to the presence of saccharine matter in tari, its strength cannot be determined by the hydrometer. Experiments made by two different methods in 1892 point, however, to the conclusion that tari contains about the same proportion of alcohol as spirit at 95° or 96° under-proof, and is therefore about 5° weaker than the weakest kind of country liquor.

13. *Pachwai*.—The revenue under this head, which includes both the rice beer, which is consumed chiefly in the districts of Western Bengal, and the millet (*marua*) beer, drunk in the Darjeeling hills, rose from Rs. 3,46,518 to Rs. 3,82,336—an increase of Rs. 35,818, or 10·3 per cent. The number of licenses for sale sanctioned fell from 1,790 to 1,736, and number settled from 1,680 to 1,668. At the same time there was an increase of 270 in the number of licenses granted for home-brewing, which are not included in the figures just quoted. The privilege of free home-brewing for domestic use has long been permitted to the aboriginal tribes in the greater part of the Chota Nagpur Division, and

has been extended since the close of the year to the district of Hazaribagh. In Darjeeling a system of allowing house-holders to brew *marua* beer for domestic use without limit of quantity, on payment of an annual fee of Rs. 2 per house, is being tried in Kalimpong during the current year. Both of these proposals have been approved by the Lieutenant-Governor as tending to promote the use of a harmless and wholesome beverage, and to discourage the consumption of country-spirit by people who have not yet acquired a taste for it. Experiments made during the year by the Deputy Commissioner of Darjeeling show that the alcoholic strength of rice beer is  $94.8^{\circ}$  under-proof, and that of millet (*marua*) beer about the same. Either drink, then, is about as strong as tari, and some  $5^{\circ}$  weaker than the weakest variety of country-spirits.

14. *Ganja*.—The following statement shows the main facts relating to ganja revenue for the last three years:—

	Licenses sanctioned.	Licenses issued.	Quantity consumed.	Revenue.
	No.	No.	Mds.	Rs.
1892-93	... 2,708	2,672	5,451	23,86,066
1893-94	... 2,736	2,715	5,116	25,35,045
1894-95	... 2,725	2,702	4,828	24,92,755

The receipts from duty fell from Rs. 14,02,568 to Rs. 13,34,269, or by Rs. 68,299; and after allowing for a rise of Rs. 26,009 under license fees, the net falling off in revenue was Rs. 42,290. This was due to a reduction of 1,285 bighas in the area under cultivation, and to the deficient outturn of the crop of February and March 1894 caused by unfavourable weather and the attacks of a kind of red spider. For these reasons prices ruled very high until the close of the year, when the new crop of 1895 came into the market. The figures of consumption are highest in Calcutta (425 maunds), and Mymensingh (401 maunds), Purnea (230 maunds), Dacca (208 maunds), Bhagalpur (206 maunds), and Monghyr (171 maunds). In Orissa the consumption fell from 236 to 169 maunds, but there was no increase in the consumption of duty-paid Garhjat ganja, which declined from 18 maunds to 17 maunds, and it seems probable that large quantities of illicit Garhjat ganja must have been imported into those districts. The smuggling of this ganja was reported on at length by the Hemp Drugs Commission, and the experiment is now being tried of introducing into the Tributary States of Orissa the system which has been in force in Kuch Bihar for many years and has worked well there. Under this arrangement the Chiefs will get Rajshahi ganja at cost-price, and will issue it to the consumers after levying duty at the rates in force in British districts. As they will make a substantial profit on the transaction, it is hoped that it may induce them to suppress the cultivation of the ganja now grown, which is not a spontaneous product, and can without doubt be extirpated if the Chiefs take the matter vigorously in hand. The other suggestions made by the Commission are under consideration.

15. *Production and distribution of Ganja*.—The following statement illustrates the production of ganja in, and its export from, Rajshahi during the past year:—

	Mds.	Mds.
<i>Production</i> —Balance of previous years ...	...	2,324
Crop of 1894, less amount exported in 1893-94 ...	...	2,489
Crop of 1895 ...	...	7,000
Total to be accounted for ...	...	11,813
<i>Export</i> of crop of 1893-94 ...	3,767	
" of 1895 ...	1,690	
Destroyed by order ...	113	
Total accounted for ...	...	5,570
Balance in hands of cultivators—		
Crop of 1894 and earlier years ...	933	
" of 1895 ...	5,310	
	...	6,243

The further distribution of the drug after it leaves Rajshahi may be illustrated thus—

		Mds.	Mds.
Balance in district golas on 1st April 1894	...		2,007
Imported from Rajshahi	... ..		5,457
Total to be accounted for			7,464
Consumed in Bengal	... ..	4,065	
Exported to North-Western Provinces	... ..	426	
" to Nepal	... ..	226	
" to Sikkim	... ..	1	
" to Kuch Bihar	... ..	62	
" to Assam	... ..	602	
" to Hill Tippera	... ..	2	
" to Orissa Tributary States	... ..	6	
" to Mauritius	... ..	85	
" to London	... ..	249	
Quantity destroyed	... ..	637	
Adjustments and wastage	... ..	125	
Total accounted for			6,486
Actually in stock on 1st April 1895	... ..		978

The quantity destroyed seems to be unduly large, as it amounts to nearly 10 per cent. of the total quantity accounted for, but this as well as the large balance in store on 1st April 1892, is explained by the fact that as the crop of February-March 1894 was a poor one, a large quantity of old ganja which would otherwise have been destroyed was retained under special orders to make up the deficient supply. Much of this, however, was not really needed, and was destroyed in March 1895, in addition to the usual quantity thus disposed of. The export of ganja to London is said to have been going on for over 30 years, and within the last five years the amount so exported has risen from 96 to 249 maunds. A small portion of this is retained in England for medical purposes, and the rest is transhipped to Demerara, Natal, and other colonies for the use of Indian coolies. Hitherto ganja exported to London has been free of duty, while the full duty has been levied on ganja sent to Mauritius. Orders have now been issued to charge duty on ganja exported to London.

16. *Bhang*.—According to Dr. Prain, whose definitions of the various products of the hemp plant have been followed in the report of the Hemp Drugs Commission—*bhang*, *siddhi*, *sabzi*, and *patti* "are different names applied to the dry leaves of the hemp plants, whether male or female, and whether cultivated or uncultivated." Although the consumption of this article rose from 943 to 1,064 maunds, and the number of licenses from 315 to 321, the total revenue fell from Rs. 55,752 to Rs. 55,394, owing to the surrender of several licenses in Calcutta and their re-settlement at reduced fees. Owing to the fact that the hemp plant grows spontaneously over a large area in Bengal, the illicit consumption of bhang cannot be effectively suppressed, and the revenue suffers. When the Excise Act is amended, power will be taken to prohibit the collection of bhang except under license, and it is hoped that this will be sufficient to protect the revenue without going the length of the suggestion made by the Hemp Drugs Commission, that occupiers of land should be made responsible that it shall not be found on their lands.

17. *Opium*.—The following statement illustrates the demand for excise opium during the last three years:—

		Licenses.	Consumption.	Revenue.
		No.	Mds.	Rs.
1892-93	...	3,031	1,934	20,85,635
1893-94	...	3,297	1,973	21,34,867
1894-95	...	3,066	2,042	22,13,746

The figures for licenses include permits to licensed druggists to sell opium and its preparations and poppy-heads for medical purposes only. The number of these was reduced by 199 during the year, the largest decrease (169) being in Noakhali, where it is stated that many village practitioners used to take out permits, not because they used any opium, but because it was supposed to add to their importance. Although the number of ordinary licenses issued was less by 29, the consumption rose by 69 maunds and the revenue by Rs. 78,879. The revenue from license fees shows an increase of Rs. 32,475, or 6.6 per cent., while the average fee per retail license was Rs. 303 as compared with Rs. 279



in the previous year. In Chittagong the receipts from license fees rose from Rs. 58,136 to Rs. 77,202—an increase of Rs. 19,066, while the consumption shows an increase of 1 maund 36 seers.

The competition for licenses which these figures indicate is believed to be due in some measure to the enormous profits to be made by smuggling excise opium into Burma, where, according to the Board, it sells sometimes as high as Rs. 100 per seer, but the last Burma report shows the Arakan selling price to be Re. 1-7 per tola, or nearly Rs. 130 per seer. This opinion is borne out by the fact that in several cases of opium smuggling recently detected in Chittagong, the drug seized was excise opium. The Commissioner of the Division states that in these cases an examination of the accounts of two rival shops showed that they received opium greatly in excess of the quantities accounted for or the balance in store. It is clear from this that the special Chittagong system of apportioning the supply of opium to the licensees of frontier shops according to the ascertained local demand is not an effective safeguard against smuggling, where the temptation is so great as is represented by the difference between the treasury price plus license fee, amounting together to Rs. 55 or Rs. 60 per seer, and the Burma price of Rs. 100 to Rs. 130 per seer, of a highly portable article, which can be smuggled into Burma across the 60 miles of land frontier or in the open boats in which much of the rice trade is carried on. The same cause is also said to account, at any rate in part, for the increase of 81 maunds 5 seers in the consumption of opium in Calcutta, and it is possible that much of this goes to Burma either direct or through Chittagong. The increase of 10 maunds 22 seers in the consumption of the Patna Division and the districts of Monghyr and Bhagalpur is thought to indicate a decrease in the supply of illicit opium through the cultivators. In Hooghly the increase of 6 maunds 33 seers is ascribed to the detection of some important cases of opium smuggling from French territory. The map annexed to the Report illustrates clearly the comparative prevalence of the use of opium throughout the Province. The area of maximum consumption lies along the coast from Puri to Chittagong, and the people of this tract contribute to the opium revenue at the rate of one rupee per one to twenty persons. To this, however, there are three exceptions, Noakhali, with the minimum incidence of one rupee to 120 persons and over, Backergunge (Re. 1 to 60-80 persons), and Khulna (Re. 1 to 40-60 persons). Next in order come the districts of Northern and Central Bengal, which pay a rupee of opium revenue per 20-40 persons, while the large tract of country, including the Patna and Bhagalpur Divisions, which pays the maximum revenue on country liquor, contributes to the receipts from opium at the minimum rate of a rupee to every 120 persons and over. Bearing in mind the popular belief that opium taken in moderation is a prophylactic against fever, it is of interest to observe that the area showing a high consumption of opium includes the fever-stricken tracts of Northern and Central Bengal, while in former years the coast districts are believed to have suffered severely from the same cause.

18. *Madak and Chandu.*—The revenue from madak rose from Rs. 78,379 to Rs. 89,409, while the number of licenses issued fell from 315 to 308. Chandu yielded Rs. 29,624, against Rs. 24,476 in the previous year, and 67 licenses were issued as compared with 73. The effect of the order issued in May 1892, prohibiting the smoking of these drugs on the premises of licensed shops, and reducing the limit of retail sale and private possession to one tola, which at first brought about a decrease of revenue, seems therefore now to have passed away, while the prohibition of private manufacture has compelled the ordinary consumer to procure his supply of the drugs from licensed vendors instead of making them up himself. Another result of the order has been to drive the consumers of madak and chandu to congregate in private houses near the shops for the purpose of smoking. These places are described by the Board, the Excise Commissioner, and several local officers as unlicensed smoking dens, and the expression seems to assume that there is something specially nefarious in the practice of resorting to them. It is, however, clearly not contrary to law, and the Lieutenant-Governor is not satisfied that any reasonable ground exists for taking special measures to interfere with it. The question of reducing the fee of Rs. 50 for the privilege of manufacturing madak or chandu for domestic use is discussed at length by the Excise Commissioner, who points to increased revenue and the fall in the number of prosecutions for unlicensed manufacture from 837 to 600, as indicating that the prohibition



of private manufacture, though possibly harassing at first to ordinary consumers, has brought about a rise in the revenue from madak and chandu. Mr. Gupta doubts whether any *bond fide* use would be made of any concession in this direction, though it might induce unscrupulous persons to start unlicensed shops, under cover of their permission to manufacture madak and chandu for private use. The Lieutenant-Governor agrees in this view. The intention of the orders of May 1892 was to prohibit private manufacture in all but very exceptional cases, which the special license fee of Rs. 50 is intended to meet. The main object seems to have been attained, people are beginning to learn that they may not make madak or chandu for themselves, and it is undesirable to introduce any further change.

19. *Methylated spirit*.—The customs returns show that during the past year the quantity of methylated spirits passed out of the Custom House increased by nearly 5,000 gallons. The greater part of the supply is derived from Germany and the Straits Settlements. Recent experience has proved that methylation by wood-naptha does not render spirit permanently unfit for human consumption, that such spirit can by adding essences be manipulated into a potable liquor which eventually passes into consumption as Eau-de-Cologne, and that, if mixed with water, it can be drunk or used to adulterate ordinary spirit. As methylated spirit pays a nominal duty of 5 per cent. *ad-valorem*, and is seldom less than 50° over-proof, it is obvious that, after its peculiar taste has been disguised, it can compete successfully with ordinary imported or country-made spirits. The question of what measures should be adopted for the protection of the revenue has recently been under consideration, and has been submitted for the orders of the Government of India.

20. *Offences against the Opium and Excise Laws*.—The number of licensees arrested for infringing the conditions of their licenses fell from 496 to 273, owing to the instructions issued to excise officers to prosecute only for wilful and persistent infringements and for fraudulent default in the payment of fees. As compared with last year, the number of other persons prosecuted shows a decline from 4,602 to 4,146, but it is higher than in 1892-93 or 1891-92. Taking both classes together, the number of persons prosecuted fell from 5,098 to 4,419, and of persons convicted from 4,352 to 3,824, while the percentage of convictions rose from 85·3 to 86·5, showing that greater care was taken in sending up cases. The amount of fines imposed fell from Rs. 89,209 to Rs. 69,056, but the proportion realised increased from 64·6 to 71·2. A sum of Rs. 58,195 was distributed in rewards to police and excise officers and informers, as against Rs. 74,540 in the previous year. In the past year, as in 1893-94, the Sonthal Parganas showed more than 100 cases of illicit distillation, Hooghly coming next with 41, and Midnapore and Bankura with 34 and 33 apiece. A curious account is given of the systematic fashion in which illicit distillation is carried on in the Damin-i-Koh by Sonthals and Paharias. Their craving for strong drink has led these people to form liquor clubs, which subscribe to pay the fines of any member who is punished for distilling. Organised frauds on the revenue of this kind cannot be adequately dealt with under the law as it now stands, and in the Bill which has been prepared by the Board to amend Bengal Act VII of 1878, power has accordingly been taken to punish excise offences by either rigorous or simple imprisonment. Singhbhum, which had 28 cases in the previous year, showed only 7 last year. The Sonthal Parganas also heads the list with 143 convictions for selling tari without license, against 11 cases in 1893-94. The decrease in arrests for the possession of foreign exciseable articles was due to the smaller number of such cases detected in districts bordering on Nepal. Mr. Colvin, Collector of Champaran, suggests that such cases should not be taken up, on the ground that the accused are mostly ignorant people; but in the Lieutenant-Governor's opinion this would be pushing leniency too far, and would tend to establish a regular contraband trade, which would soon become difficult to suppress.

21. The Lieutenant-Governor desires to thank Mr. Krishna Govinda Gupta for an excellent report, and for his successful management of the Excise Department during the year. Sir Charles Elliott hopes that Excise Administration in Bengal, after sustaining many attacks and undergoing many changes of policy, is now established on a fairly firm basis, and that in future a steady development of the revenue may be looked for without any undue increase in the consumption of either liquors or drugs.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Govt. of Bengal.

# RESOLUTION ON THE GENERAL REPORT ON PUBLIC INSTRUCTION IN BENGAL FOR THE YEAR 1894-95.

## GENERAL DEPARTMENT—EDUCATION.

*Darjeeling, the 2nd November 1895.*

RESOLUTION—No. 428T.—G.

READ—

The Report on Public Instruction in Bengal for the year 1894-95.

Sir Alfred Croft, K.C.I.E., was in charge of the Education Department, as  
Director of Public Instruction, throughout the  
entire year 1894-95, and has submitted the Annual

Report in good time. This is the alternate year in which the report is confined  
mainly to statistical results, and the discussion of questions of general policy is  
avoided, so that it is justifiably 22 pages shorter than that for 1893-94. But  
its abbreviation has in no way diminished its completeness as a record, the value  
of its suggestions, or its utility to Government for administrative purposes.

2. The advance in the number of pupils under instruction is considerably  
larger than last year, when the total gain was  
only of 14,211 pupils and 613 institutions. This  
year the number of pupils in public institutions has risen by 87,422 from  
1,413,737 to 1,501,159, and in private institutions by 4,830 from 135,530 to  
140,360: there has been a total gain of 92,252 pupils. The institutions have  
also increased in number: public from 53,615 to 55,800, private or indigenous  
from 13,602 to 13,941: total increase 2,524. The gain has been shared by  
nearly all classes of institutions. Colleges increased by one; but as one of these  
furnished no returns, the number remains apparently stationary, with a slight  
reduction in the number of pupils. Middle vernacular schools are slightly fewer,  
but have more pupils. Among the schools classified as "public institutions"  
which adopt departmental standards, the number supported or aided by public  
funds has risen from 41,981 to 42,476, and the number of unaided schools has  
also increased from 11,634 to 13,324. Taking University and Secondary  
education together, the number of pupils under a higher class of instruction has  
risen from 208,453 to 216,527. The increase in the number of pupils at primary  
schools is from 1,130,551 to 1,206,285, the development having taken place in  
both upper and lower primaries, but more particularly in the latter. The  
figures for the lower primary schools are given below for the last five years:—

			Schools.	Pupils.
1890-91	...	...	43,998	942,244
1891-92	...	...	44,920	987,948
1892-93	...	...	43,829	983,271
1893-94	...	...	44,020	988,745
1894-95	...	...	45,897	1,055,253

Female schools continue to make satisfactory progress, as shown by the  
following figures for the quinquennial period—

			Schools.	Pupils.
1890-91	...	...	2,270	49,638
1891-92	...	...	2,743	58,801
1892-93	...	...	2,856	60,249
1893-94	...	...	3,042	65,011
1894-95	...	...	3,261	68,477

Unlike last year, Arabic and Persian schools have advanced from 1,225  
with 14,688 pupils to 1,383 with 16,417 pupils, while Sanskrit schools have  
receded both in numbers and attendance.

3. In the population of Bengal which is included in the educational returns, there are, at the usual rate of 15 per cent., 5,461,912 male children and 5,494,642 female children of school-going age. The returns show 1,527,511 boys and 114,008 girls at school. Thus of all boys of a school-going age 27·9 per cent., and of all girls of a school-going age 2·0 per cent., are at school. The proportion of boys actually at school in the different districts, compared with the number of boys of school-going age, taken at the usual rate of 15 per cent. of the male population, varies from nearly 67 per cent. in Noakhali and 60 per cent. in Chittagong, Hooghly and Calcutta, and 57 per cent. in Midnapore and Howrah, to 11 per cent. in Palamau and Purnea, and 10 per cent. in the Chittagong Hill Tracts. The Bihar and Bhagalpur districts still send far fewer boys to school than they should send.

4. The income of the Department remained nearly stationary in the year, viz., Rs. 5,63,000 as compared with Rs. 5,71,000 in 1893-94. The gross expenditure charged in the accounts to the Department was Rs. 26,37,703 as compared with Rs. 25,72,107 in 1893-94. The net expenditure from Provincial revenues on education, according to the Accountant-General, was Rs. 20,67,074 as compared with Rs. 20,06,388, an increase of Rs. 60,686. Taking the departmental accounts, as distinguished from those of the Financial Department, the total expenditure on education in Bengal, including all disbursements from public and private sources, amounted to Rs. 98,29,572, an increase of Rs. 2,54,115 over the Rs. 95,75,457 of the preceding year. The net expenditure from all public sources, including District and Municipal Funds, increased from Rs. 34,69,664 to Rs. 34,91,020, i.e., by Rs. 21,356, while expenditure from private sources increased from Rs. 61,05,793 to Rs. 63,38,552, or by Rs. 2,32,759, of which Rs. 13,754 are due to the increased income of the University. Primary education cost more by Rs. 1,30,617: of this amount increased expenditure from District Funds, owing to additional grants made for the purpose from Provincial revenues, accounts for Rs. 54,260, while the expenditure from private sources increased by Rs. 71,973. The municipalities have continued, as was noticed last year, to devote less of their funds to secondary and more to primary education. The figures were—

		Secondary.	Primary.
		Rs.	Rs.
1892-93	...	37,000	24,000
1893-94	...	29,970	41,419
1894-95	...	26,838	48,344

5. The Director was on inspection tours extending over 51 days, and visited 53 institutions of all grades and kinds in 14 districts. Owing to his appointment as President of a Committee for the revision of the European School Code, he was unable to do so much touring as last year, when he and Dr. Martin between them spent 85 days in the mufassal and visited 114 institutions in 17 districts. The time spent on inspection by the inspecting staff of the Province, throughout the year, is exhibited in the following statement and compared with last year:—

	1893-94.		1894-95.	
	Number of officers.	Average number of days.	Number of officers.	Average number of days.
1	2	3	4	5
Inspectors ... ..	5	172	5	158
Assistant and Joint-Inspectors ... ..	9	152	9	191
Inspector of European Schools ... ..	2	95	1	68
Deputy Inspectors ... ..	44	182	44	172
Sub-Inspectors ... ..	200	212	204	198

It is unnecessary to repeat in any detail the Director's remarks, with which the Lieutenant-Governor agrees, on the amount of inspection done by individual officers. Among Inspectors, he gives the highest praise to Dr. Martin and Rai Radhika Prasanna Mukerjea, Bahadur. Among the Deputy Inspectors, the prescribed minimum rate of 150 days touring in the year was attained in all the districts except Hooghly, Midnapore, and Darbhanga, in which there was a change of officers. The Sub-Inspectors have on an average exceeded the prescribed minimum of 200 days touring in all the Divisions, but the number of Sub-Inspectors in the Dacca Division appears to be deficient and to require strengthening. Last year His Honour expressed his concurrence with the Director's opinion that 400 visits to schools was too high a minimum to fix, and that 500 visits implied perfunctory work. In the instances of hasty work mentioned by the Director of Public Instruction in his paragraph 29, severe notice should be taken and travelling allowance should be refused when tours are made in the manner described. The reduced standard of 350 schools visited has been attained in all Divisions except Rajshahi. In that Division the average number of schools visited was as low as 308, while in Patna it rose to 559. His Honour trusts that due notice has been taken of the Sub-Inspectors whose conduct has been recorded as unsatisfactory. The "victim of a chronic lethargy" (from which he cannot be roused) should be dealt with strictly. The gradual substitution of inspecting pundits for chief gurus has been completed in all the Divisions, even in the urban area of the 24-Parganas. Last year 484 pandits paid 239,835 visits to schools, average 495; this year 483 paid 241,549 visits, average 499.

6. The Lieutenant-Governor is glad to hear that the relations between the District Boards and the Education Department were on the whole harmonious. There has been some contention on the subject of the Boards placing their Sub-Inspectors at the disposal of the Deputy Inspector for the punctual preparation of the annual returns, and it is hoped that the District Boards will see the necessity of meeting the reasonable requirements of the Deputy Inspector in this respect. Most of the District Boards have Educational Sub-Committees, and the Deputy Inspector is generally a leading member, and in some instances the Chairman of these bodies. Complaints against the District Boards are diminishing every year. With few exceptions all the Boards sent in their reports to the Inspectors with punctuality, and little is said now of delays in passing bills and disposal of correspondence. The Director writes:—"The tendency to reduce educational expenditure, or to spend educational savings on objects other than education, appears to have well nigh disappeared. It was reported last year that the Burdwan District Board did not spend so much on education as had been spent by Government before the Local Self-Government Act came into force. Dr. Martin now notices that the Board has decided to restore to education the savings thus effected, and that Rs. 2,000 have been consequently provided this year for primary education in excess of the allotment. The Chittagong Board is reported to have raised its educational grant by over Rs. 5,000. Other Boards have shown similar liberality towards education. Every case in which I am not satisfied, on examining a Board's budget, with the proposed rate of educational expenditure, is promptly challenged, and it is seldom that after correspondence a satisfactory settlement is not arrived at." It is hoped that the principle laid down last year by Government, that educational expenditure should grow with the growth of the Board's ordinary income, will protect education against sudden and embarrassing fluctuations. Local Boards appear to exercise control over secondary education only in the Burdwan district, and in many districts they have no connection at all with educational matters. The Lieutenant-Governor's advice is that they should be limited to the control of primary education and such cognate matters as the payment of teachers on the authority of the Sub-Inspector, the appointment of teachers, and the selection of backward schools for stipends. The two Howrah Local Boards rarely consulted the Deputy Inspector, and worked independently of each other, with the result that decentralization produced disorder.

7. The number of Colleges has increased from 36 to 37, divided into Government 11, Municipal 1, Aided 8, and Unaided 17, the new one (under the last category) being the

University Education.



Central Institution at Calcutta: but Bishop's College furnished no returns. The total number of students on the rolls has diminished from 6,240 to 6,122, i.e., by 118; this slight fluctuation is due to the smaller number who passed the Entrance examination in 1894. Of the total 6,122 college students, 3,999 read in the Calcutta Colleges and 2,123 in the mufassal, as compared with 3,892 and 2,348 last year. The importance, therefore, of providing adequate accommodation and supervision for the students in Calcutta is abundantly manifest. The variations in the numbers of the successful candidates at the University Examinations during the last six calendar years are shown in the following statement:—

	1890.	1891.	1892.	1893.	1894.	1895.
1	2	3	4	5	6	7
Entrance ...	2,156	1,710	1,643	2,915	1,863	2,194
Percentage of success ...	50	43	40	67	44	47
First Arts ...	996	693	1,011	830	826	1,162
Percentage of success ...	36	36	44	37	38	41
Bachelors of Arts ...	399	231	280	301	484	416
Percentage of success ...	40	29	24	25	36	32
Bachelors of Law ...	254	128	48	148	99	71
Percentage of success ...	70	63	27	47	32	24
Masters of Arts ...	57	46	54	57	52	...
Percentage of success ...	45	36	46	44	36	...

\* The examination is held in November.

The Lieutenant Governor has more than once drawn attention to the want of uniformity and the element of uncertainty which so largely affect the results of University Examinations. The fluctuations are graphically shown in the accompanying diagram. The University could confer no greater boon upon the cause of education than by ensuring equal success to equal proficiency in successive years.

8. There were 2,817 candidates, as compared with 2,179 in 1893-94, in the First Arts Examination held in February 1895. As 1,162 passed, against 826, the percentage of success rose from 38 to 41. In Government Colleges the percentage was 51, in Aided Colleges 40, and in Unaided Colleges 37. All the Government Colleges, with the exception of Patna and Rajshahi, passed more than half their candidates, the Dacca, Krishnagar and Chittagong Colleges standing highest with 63, 70 and 73 per cent. respectively. Among Colleges under municipal, missionary, or other private management, the most successful were the Midnapore College (72 per cent.), the Burdwan Maharaja's College (57), and the Barisal Braja Mohun Institution (61).

Among the candidates for the B.A. degree, the percentage of success (calculating on the candidates in both courses together) fell from 36 to 32; the number of candidates for the A course fell from 992 to 905, while those for the B course increased in number from 355 to 447, the total numbers remaining very nearly the same. Comparing the groups of Colleges, the ratio of success was as follows:—

	A Course.	B Course.	Total percentage.
Government ...	34	42	37
Aided ...	31	39	34
Unaided ...	24	37	28
Total ...	27	40	32

Last year greater success was achieved in the A than in the B course, and it was hoped that at last the two examinations had been conducted with nearly equal severity. This year the figures appear to show that the B course had a decided advantage. Whereas the ratio of success in the A course was 27 per cent. on the whole number of candidates and 39 per cent. in the Presidency





College, in the B course 39 per cent. of the whole number of candidates, and 51 per cent. in the Presidency College, were successful. The figures of preceding years have been:—

			A Course.	B Course.	Total percentage.
1889	...	...	33	39	34
1890	...	...	39	49	40
1891	...	...	26	33	29
1892	...	...	20	47	24
1893	...	...	21	45	25
1894	...	...	37	34	36
1895	...	...	27	40	32

The figures, however, previously returned are to a small degree inaccurate. It now appears that, in the University tables hitherto published, if a candidate passed with honours in two subjects he was entered in the tables as two candidates. This was an extraordinary error, and it is strange that it was not detected sooner. The mistake having been discovered, the correct number of candidates is shown for this year.

Of the 144 candidates for the M.A. degree, 52 passed, *i.e.* 36 per cent. as compared with 44 per cent. last year. The failure in Mathematics was remarkable. Last year 8 out of 14 passed; this year only one out of 14 was successful. The Lieutenant-Governor would be glad to know whether any explanation of this circumstance can be offered. The comparative success in the literary and scientific subjects is as follows:—

			A.	B.
1893	...	...	35	78
1894	...	...	33	48

These figures afford corroboration to the idea that the scientific course is the easier.

9. The total expenditure upon collegiate education has increased from Rs. 7,19,354 to Rs. 7,20,875, or by Rs. 1,521: the expenditure from Provincial revenues has increased by Rs. 3,203: the fee-receipts are lower by Rs. 2,673, while the receipts from subscriptions and endowments show a rise of Rs. 991. The charge on Provincial revenues is over 40 per cent. of the total expenditure. The annual cost of each student in a Government College during the year rose from Rs. 236-14-5 to Rs. 238-11-8, and the cost of his education to Government from Rs. 142-15 to Rs. 152-2-10. The cost of collegiate education generally is Rs. 114. The cost of the whole number of collegiate students for the past five years may be exhibited as follows, showing that the hitherto descending scale of expenditure has been unchanged this year:—

	1891.	1892.	1893.	1894.	1895.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Average cost of each student in a college in Bengal ...	129	127	124	114	114
The Government share thereof ...	52	52	50	46	46

10. In dealing with the subject of Collegiate Administration, the Lieutenant-Governor cannot omit to place on record his sense of the valuable aid afforded to Government in the education of the rising generation by two Societies, viz. the Society for the Higher Training of Young Men, of which Mr. Cotton is President, and Mr. C. R. Wilson Secretary, and the Indian Association for the Cultivation of Science, under the presidency and guidance of Dr. Mahendra Lal Sarkar, C.I.E. Both of these institutions have done good work in carrying on the education of young men outside of the University curriculum and the class teaching of the Colleges. They are based on sound principles and deserve cordial encouragement from Government and the public.

11. The main statistics relating to secondary schools for the last five years are contained in the following statement furnished by the Director in his 61st paragraph:—

	Number of schools.	Number of pupils.	EXPENDITURE.		
			Public funds.	Private funds.	Total.
1	2	3	4	5	6
			Rs.	Rs.	Rs.
1890-91	2,393	199,105	6,11,046	20,62,859	26,73,905
1891-92	2,285	194,178	5,94,846	20,87,904	26,82,750
1892-93	2,326	198,270	5,90,493	20,92,642	26,83,135
1893-94	2,373	198,736	5,94,328	21,33,751	27,28,079
1894-95	2,397	206,989	6,09,740	21,85,658	27,95,398

Secondary schools of all classes taken together have increased from 2,373 to 2,397, or about one per cent., and their pupils from 198,736 to 206,989, or by 41 per cent. The total expenditure has risen this year by Rs. 67,319. The expenditure from Provincial Revenues has increased by Rs. 13,848, and that from District Funds by Rs. 4,696, while Municipal Funds have contributed Rs. 3,132 less than in 1893-94. This is in harmony with the policy of Government to discourage municipal expenditure on secondary education.

12. The number of Government High Schools was unaltered, but the attendance of pupils slightly diminished. There were three fewer schools managed by District or Municipal Boards, but an increase of 11 in the aided High schools, the total number of High schools being 372 against 361 in 1893-94. The number of pupils rose from 75,682 to 78,227, an increase of 2,545, or about 3 per cent. At the University Entrance Examination 2,194 boys, *i.e.*, 47.3 per cent., passed out of 4,633 candidates, against 1,863 successful out of 4,268 candidates in 1893-94. The percentage of successful candidates for the previous six years has been 25, 50, 43, 40, 67, 44, so that the figure for the year under review represents a greater degree of leniency, which is shared by all the classes of schools. Government institutions passed nearly 67 per cent. of their candidates, while schools under private management, both aided and unaided, were successful to the extent of nearly 42 and nearly 40 per cent. While the general ratio of success was 47.3, the several Divisions varied from Chota Nagpur, 79 per cent., the highest, to Patna, 30 per cent., the lowest. In the Resolution on last year's report, when commenting on the system of merit marks (allotted to the different schools), which depended solely on the number of candidates passing at the Entrance Examination in the different Divisions, Government observed that, to be a satisfactory test of merit, some deduction should be made for unsuccessful candidates. This has now been arranged for by multiplying the marks as previously calculated by a fraction, the numerator of which is the number of successful candidates, and the denominator the number sent up to the examination. Judged by this adjusted standard, the Hindu, Hooghly and Dacca Collegiate Schools, and the Faridpur, Birbhum, and Mymensingh High Schools, distinguished themselves by the performances of their pupils in the examinations.

13. The Middle English Schools increased from 869 with 60,250 pupils, to 896 with 64,649 pupils. In the Middle Scholarship Examination, where the standard required is the full middle vernacular test, together with English language and composition as taught in the middle classes of High English Schools, 1,855 were successful out of 2,959 candidates (1,000 gaining the English and 855 the vernacular certificate), the percentage of success among the candidates being 63 against 58 last year and 66 in 1892-93. The examination for all the Bengali-speaking districts was again held with the same set of question papers for the whole Province; but the Boards of Examiners for the different circles continued to examine the answer papers under the supervision of the Circle Inspectors. It is understood that in the Hindi-speaking districts the practice of having one

set of question papers for all has also been adopted. The Middle Vernacular Schools have fallen from 1,143 to 1,129, practically the same as in 1892-93, but the pupils are more numerous, having increased from 62,804 to 64,113. In the examination, which is the same as the preceding, with the omission of the papers in the English language, the percentage of success was 54·2 against 52·9 in the preceding year, 2,106 candidates out of 3,888 being successful.

14. The record of the endeavours made to engraft drawing on the educational course is not altogether encouraging. **Drawing.** Last year 40 pupils from 12 Government High Schools took up drawing as a subject at the University Entrance Examination, and 19 passed. This year out of 72 candidates, only 11 from 9 Government schools passed; and out of the total 307 candidates, who were examined in drawing by the University, only 24 qualified. Students have never taken kindly to this subject, which carries no marks at the examination, and the University has not favoured the idea of making drawing compulsory. To meet this difficulty it had long been proposed to assign marks for drawing in the award of junior scholarships, but the want of teachers prevented the adoption of this plan. Last year Government laid down that the time had arrived when the supply of qualified teachers was sufficient to justify the rule that the marks obtained in drawing should count in the award of junior scholarships, and a notification was issued during the year, specifying the number of marks so obtainable. In all Government High Schools which have a drawing master, the subject is to be compulsory in certain classes. In the last examination for vernacular masters, the result in drawing, as regards the qualification for special certificates, was very disappointing, but measures have been taken to secure greater attention to the subject and a steady and sufficient supply of qualified teachers.

15. The Lieutenant-Governor has perused with regret the list of cases of breach of discipline set out by the Director in his 79th paragraph. He does not suppose that any orders of Government will altogether change the nature of boys, and instances of outbreaks of youthful offenders still occur in England. But the cases of serious misconduct now reported are numerous, and show that the standard of discipline in this country admits of considerable improvement before it reaches the English level. The behaviour of the boys of the Krishnagar College at the annual athletic sports which were held in the circuit-house compound in the presence of the Magistrate and a large body of police is said to have been disgraceful: the Magistrate and other officials present were disregarded, and stones thrown at the police. The Lieutenant-Governor concurs with Sir Alfred Croft's expression of regret that the offenders could not be identified, and with the opinion that in such cases, where the actual culprits cannot be detected, the adoption of the system of general punishment, as practised in English public schools, is perfectly right and proper, either by the curtailment of holidays or the denial of some privilege or liberty for a definite time. Sir Charles Elliott is glad to read that the Noakhali Zila School, where unruliness had been reported for two years, has now a clean record, and that the good results are attributable to the punishment of the offenders and the strict discipline enforced by the head-master. The operation of the transfer rules has done much to improve the previous state of things, but instances still occur where they afford opportunities for fresh offences in the shape of forgery and mis-statements. In the case of these rules the co-operation of the parents and guardians is essential to their observance, and it is matter for regret that the Director should have to write that "guardians often exercise too little control over their wards, and instances have occurred in which they have been charged with complicity in their misconduct. Thus, in the case of junior pupils, in order to avoid the payment of the transfer fee, guardians have been found to send their school wards to new schools with a declaration that they have not been in any school before."

16. The Lieutenant-Governor has always attached the greatest importance to the provision of boarding-houses in connexion with schools as a means of enforcing discipline and developing scholastic life in some of its most cherished relations. He has read, therefore, with the greatest satisfaction the Director's report that this importance is now fully recognised, and that many public-spirited gentlemen

have come forward to help in the erection of houses for the accommodation of students. Sir A. Croft writes as follows:—"As instances of liberality in this direction, may be mentioned the gift of a pukka house and of the land on which it stands, by Rai Jotindra Nath Chaudhuri, M.A., B.L., for the benefit of the Taki School in the Presidency Division, and the erection of a house at his own cost by Babu Gobinda Nath Saha Chaudhuri of Parsadanga, for the use of boarders attending the Pabna Zila School. The Maharaja of Sonbursa in the Bhagalpur Division is also stated to have attached a boarding-house to his unaided high school for Rajputs. The members of the Oxford Mission House established a hostel in the Chorbagan quarter of the town of Calcutta, in which the management is left with the students themselves so far as concerns their boarding, their conduct and behaviour being closely supervised by a member of the Mission. But the benefit to be derived from boarding-houses cannot be fully realised so long as all non-resident pupils, or all those who do not put up with their *bonâ fide* guardians, are not compelled to live in them." Government has been able to make, during the current year, an important step in this direction, by undertaking the construction of a boarding-house for the students of the Calcutta Madrasa and the enlargement of the Eden Hindu Hostel, so as to enable it to hold all the students of the Presidency College, who are otherwise unprovided for. This long desired object has been deferred till now by financial considerations, but the present prosperous state of the Provincial revenues has enabled the Lieutenant-Governor to carry it out, and when the building is completed, residence in it will be compulsory on all who do not live with their parents or guardians, or in such a well-regulated establishment as that of the Oxford Mission. Sir Charles Elliott hopes that the time may come when the University will refuse to affiliate any school or college which does not make similar provision for its students.

17. The subject of the advantages of physical training for students has been fully dealt with in previous years, and the Director again refers to it, and gives a summary (in paragraphs 56 and 82) of the more interesting particulars. Athletic sports continue to grow in popularity, and the greater interest taken in football of recent years has attracted much attention. The Lieutenant-Governor's acknowledgments are due to the collegiate and school authorities, Government officers, and private gentlemen who have given encouragement to students in the pursuit of manly games by personal example and the offer of prizes. Friendly matches played at cricket or football between the residents at a station and the school-boys are calculated to produce good-fellowship and good temper, a kindly regard for opponents, and respect for skill and pluck. The allotment by the District Board of Balasore of a sum of money for the appointment of a peripatetic gymnastic teacher, who is to teach physical exercises in middle and primary schools controlled by the Board, seems to be a step in the right direction. It is hoped that Marcus Square, in the centre of Calcutta, may soon be opened as a playground for the use of the large number of students and residents in the neighbourhood who have not the time or the means to repair to the *maidan* for wholesome exercise.

Primary education.

18. The numerical fluctuations in primary education for native boys during the past five years are shown in the following statement:—

	UPPER PRIMARY.		LOWER PRIMARY.	
	Number of schools.	Pupils.	Number of schools.	Pupils.
1	2	3	4	5
1890-91	3,537	128,537	43,997	942,211
1891-92	3,661	135,371	44,918	987,876
1892-93	3,697	139,726	43,828	983,204
1893-94	3,763	141,483	44,020	988,745
1894-95	3,901	150,878	45,897	1,055,258



The number of schools in both divisions has increased by 2,015 and their pupils by 75,903, or 6·7 per cent., so that the average strength of a pathsala has advanced from 23·6 to 24·2. Upper primaries and their pupils continue to exhibit a constant increase: the lower primaries, which have sometimes shown curious variations in numbers, have now taken a decided step in advance. These developments in numbers are shared by almost all the Divisions in the Province. The variations depend more specially on local causes, and it has been assumed that the agricultural prosperity of the country during the last cold-weather was favourable to the growth of schools.

19. The expenditure incurred by the Department (including the Provincial expenditure in municipalities) and by District Boards, on account of primary education for native boys and girls, is shown in the following table to have exceeded that for 1893-94 by Rs. 86,566, which indicates a satisfactory development during the year:—

Description of schools and expenditure.	From Provincial revenues.		From district funds.		Total.	
	1893-94.	1894-95.	1893-94.	1894-95.	1893-94.	1894-95.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Stipendiary schools ... ..	1,03,701	1,06,969	1,56,003	1,70,079	2,59,704	2,76,948
Non-stipendiary ... ..	24,120	27,519	3,11,375	3,37,406	3,35,504	3,55,012
Subordinate inspecting agency ...	13,281	12,130	80,483	86,054	93,764	98,184
Primary scholarships ... ..		2,183		22,358		24,439
Examinations, prizes and rewards...	8,159	6,309	41,039	35,100	52,223	41,469
Buildings and furniture ... ..	5,596	5,722	1,956	2,337	7,554	8,059
Charges for abolished schools ...	4,335	3,028	9,216	11,346	13,551	14,374
Stipends to gurus under training ...		51		1,585		1,646
Miscellaneous ... ..	9,594	11,131	23,933	21,403	33,336	22,020
Total ... ..	1,68,627	1,74,437	6,37,004	7,07,700	7,95,631	8,82,197
Allotment ... ..	1,77,501	1,85,064	6,51,380	7,30,856	8,28,641	9,15,590
Savings ... ..	8,874	11,227	24,376	22,096	33,310	33,323

The ordinary departmental budget grant was swelled by the re-grant of a further sum of Rs. 31,000, being the amount of savings in the allotment for primary education in municipalities and cantonments for 1893-94. Another sum of Rs. 40,568, representing the unallotted balance of the grant for primary education in municipalities and non-Board districts for 1894-95, was also placed at the Director's disposal, with instructions to spend as much as possible of the amount on primary education in the mufassal during the year under report. He allotted Rs. 56,500 to 26 different District Boards, while the total of the Departmental grants on account of schools in non-Board districts, Government estates, and municipal areas in Board districts amounted to Rs. 1,85,664, and the expenditure therefrom to Rs. 1,74,437. Many of the Board districts failed to spend their additional grants, and their savings, amounted to Rs. 22,096, have been re-appropriated for primary education in the current year. The municipal expenditure on primary schools rose from Rs. 32,916 in 1892-93 to Rs. 51,630 in 1893-94 and to Rs. 58,672 in 1894-95. The Lieutenant-Governor trusts that the municipalities will continue to regard the promotion of primary education as one of the first calls on their income, until the standard of their duty in this respect, as explained in previous years, has been attained.

20. Of the three systems under which payments to primary schools are regulated, viz. (1) by stipends, (2) by rewards for pupils who pass in the fixed standards, (3) by a mixed system of small stipends supplemented by rewards, Government and the Director recommend the last as preferable to the two others, at least in the case of the Lower Primary schools, and discourage the adoption, except in Upper Primary schools and in special cases, of the plan of payment by stipends only. The subject has been treated at length in previous reports, and this year there is little to notice but the variations in the figures showing the payments made. The sum spent in rewards has risen from Rs. 3,49,634 to Rs. 4,05,199, while the expenditure on stipends has risen from Rs. 2,46,473 to Rs. 2,58,591. The increased expenditure on stipends is practically confined to the Burdwan and Rajshahi Divisions. The system of paying rewards in advance, that is, of



giving small stipends, the amount of which is eventually deducted from the reward which the school earns, is in partial though increasing operation in several districts, the payments under this system having advanced from Rs. 23,860 to Rs. 34,348. The advanced payments at the rate of Re. 1 or Re. 1-8 a month were originally intended to ensure the stability of the weaker schools, but the Director reports that, these being precisely the institutions which were the least likely to earn Rs. 12 or Rs. 18 a year in rewards, the Deputy Inspectors in many districts felt some hesitation in incurring expenditure, the adjustment of which at the end of the year might involve them in difficulty. The system has, however, made progress in the more advanced districts, and should be encouraged.

21. The expenditure on upper and lower primary schools, and the relative Comparison of cost of upper and lower primaries. cost in these classes are shown in the following table, Division by Division:—

*Primary Schools.*

Division.	Allotment.	Expenditure.		Number of schools.		Number of pupils.		Cost per school.		Cost per pupil.	
		Upper.	Lower.	Upper.	Lower.	Upper.	Lower.	Upper.	Lower.	Upper.	Lower.
1	2	3	4	5	6	7	8	9	10	11	12
	Rs.	Rs.	Rs.					Rs.	Rs.	Rs.	Rs.
Burdwan ... ..	1,20,068	34,443	79,085	749	8,237	27,908	205,061	45'0	9'7	10'8	6'2
Presidency ... ..	1,02,340	17,220	63,047	387	3,509	16,081	181,320	44'5	16'2	17'1	9'1
Calcutta ... ..	11,000	1,264	7,155	16	187	1,067	8,057	79'	38'2	18'0	13'2
Rajshahi ... ..	1,11,796	22,763	52,561	433	2,193	15,885	59,054	52'5	23'0	22'0	14'
Dacca ... ..	1,04,724	20,147	50,067	673	4,983	20,026	115,126	34'8	11'3	17'4	7'8
Chittagong ... ..	60,443	10,368	39,507	424	3,372	18,648	85,416	42'0	11'7	10'6	7'4
Patna ... ..	1,31,643	15,378	76,357	174	4,604	8,628	108,408	88'4	15'0	28'8	10'4
Bhagalpur ... ..	97,137	14,811	46,044	214	2,234	8,621	50,128	69'5	20'6	27'9	14'7
Orissa ... ..	68,954	11,640	29,605	222	3,241	6,643	52,089	61'0	8'8	28'2	9'
Chota Nagpur ... ..	72,682	7,707	48,471	126	1,985	5,004	51,153	61'6	25'	22'1	15'1
Total for 1894-95 ...	8,98,967	1,70,771	4,93,019	3,448	31,806	132,611	647,842	46'5	14'1	20'8	9'3
Total for 1893-94 ...	7,33,710	1,61,049	4,34,482	3,370	34,721	125,792	520,575	47'7	12'6	20'4	8'4

The average cost of the two classes throughout Bengal remains at about Rs. 4 a month for an upper, and Re. 1 a month for a lower primary school. The annual cost of each pupil in an upper primary school has advanced from Rs. 20'4 to Rs. 20'8, and in a lower primary school from Rs. 8'4 to Rs. 9'3. The wide variations in cost in the different Divisions show that there is room for the exercise of considerable economy.

22. An elaborate statement is furnished by the Director in his paragraph 90 of the Report, to show the number of pupils in each district and Division in the different stages of primary education, and to compare the relative positions of the districts and Divisions. The principle of the table is that a merit-mark is given to each school by assigning values of 5, 3, and 1 respectively to pupils in the three stages—(1) upper primary, (2) lower primary reading printed books, (3) lower primary not reading printed books. The divisional figures showing the percentage of merit marks to the male population of a school-going age are reproduced in the margin. The order of the Divisions remains the same as last year, except that Dacca now shows better results than Orissa. The Burdwan Division, with its advantage of having had an indigenous system of education from early days, still occupies the first place, by showing the highest percentage of merit-marks on population of school-going age, Hooghly being the best district, and Howrah and Midnapore nearly as successful. As in last year, the results are least satisfactory in the Patna and Bhaga'pur Divisions (which might have done better with their additional allotments), and particularly in the Muzaffarpur, Shahabad and Purnea districts. The percentage of primary pupils (boys) to the male population of school-going age has increased for the whole Province from 22'4 to 24. The total merit-marks for the Province show an advance, numerically measured, of 7 per cent., whereas in the previous biennial period the improvement was only 1'7 per cent.

Divisions.	Boys only.
Burdwan ...	128'4
Chittagong ...	102'3
Presidency ...	77'3
Dacca ...	77'3
Orissa ...	73'7
Rajshahi ...	49'3
Chota Nagpur ...	41'7
Patna ...	30'1
Bhagalpur ...	29'4

The Director has made some interesting calculations to show that increased allotments have invariably produced improved results, and, as he observes, it is highly satisfactory to find that the liberality of Government has already effected an educational advance that can be measured.

23. A description of the system of placing post-offices under village school-masters, with a small allowance for the additional work (to be done out of school hours), was given in last year's report. Various complaints have come to light during the year, and certain inconveniences arising from alleged incompatibility of the dual duties has been reported. But, as the Director shows, the inconveniences can mostly be avoided by judicious management, and, so long as the postal duties are not performed during school hours, the expansion of the postal arrangements is undoubtedly a public good. The Lieutenant-Governor is of opinion that the plan should be persevered in and details settled with the Postmaster-General.

24. The number of training schools for masters and mistresses was practically stationary (26), though their pupils decreased from 1,125 to 1,006. The number of guru-training classes fell from 218 to 149, a large number having been closed. The expenditure from Provincial revenues on all these institutions decreased from Rs. 86,444 to Rs. 84,068, while the total expenditure rose from Rs. 1,17,803 to Rs. 1,19,572. The average cost to Government of the education of each pupil in a training school varied from Rs. 92 at Hooghly and Rs. 98 at Rangpur, to Rs. 177 at Calcutta, Rs. 169 at Dacca, Rs. 154 at Patna, and Rs. 152 at Cuttack. The results of the Vernacular Mastership Examination for pupils of first grade training schools, excluding private candidates (of whom 8 were successful), show 256 as having passed out of 424 candidates; in the previous year 276 (excluding 22 successful private candidates) passed out of 483. Seventy-six men as compared with 66, 110 and 142 in the three preceding years, have been granted first grade certificates after the three years' course. Drawing being compulsory for these examinees, all the 256 who passed the examination passed in that subject, but not a single examinee succeeded in obtaining a special certificate as a teacher of drawing.

Last year as many as 25 qualified in this way. Sir Alfred Croft writes:—

"A good deal may have been due to a difference of standard, the examiner in 1894 having been the head-master of the Dacca Survey School, and in 1895 the head-master of the Calcutta School of Art; but even though the standard may have been a bit lax to start with and is now being pulled up, it was to be hoped that the candidates would advance in correspondence with the standard. I have now drawn the attention of all Inspectors and head-masters of training schools to these results, pointing out the importance of the subject and the necessity of securing a due supply of qualified teachers to meet the anticipated demand, and requiring them to give more hours a week to drawing, so that these lamentable results may not recur."

It is essential that the examination in drawing should be common for the whole Province, and this should be arranged for the future.

25. The academical qualifications and certificates of previous training possessed by the 89 Professors in the Government Colleges, the 3,935 teachers in the 377 high English schools, and the 10,879 teachers employed in middle English, middle vernacular, and primary schools are exhibited statistically in paragraphs 55, 71, and 111 of the Report. Of the 89 Professors, all but 11 possess University degrees or titles conferred in the Sanskrit examination. Of the 3,935 teachers in high schools, 1,334 hold University degrees (including the F.A.) and 1,089 hold no certificates; the rest have passed qualifying examinations of different kinds. In 670 middle English schools, out of 2,841 teachers, 739 had passed the Entrance or some higher standard of the University, 644 the Vernacular Mastership Examination, 277 the middle English, and 400 the middle vernacular test. Out of 2,789 teachers in middle vernacular schools, 119 had passed the University Entrance or higher examination, 970 the vernacular mastership test, 1,076 the middle vernacular. In 3,840 upper primary schools there are 5,249 teachers, of whom 2,724 had passed the middle vernacular test and 1,222 had passed no test at all. These statistical tables should be continued from year to year, and should show a regular

advance in the numbers of those who possess University degrees or have passed examinations of a qualifying nature.

26. The statistics of the numbers and cost of all institutions and departments of institutions teaching Law, Medicine, or Engineering, the Calcutta School of Art, industrial schools, and other schools of a special character, are exhibited in the following form:—

1	2	3	4	EXPENDITURE.					10	Average annual cost of educating each pupil.		
				From public funds.			From private funds.			Total.	Cost to public funds.	Total cost.
				From Provincial revenues.	From district funds.	From Municipal Funds.	From fees and fines.	From other sources.				
1	2	3	4	5	6	7	8	9	10	11	12	
<b>I.—Law.</b>												
Government Law Schools ...	6	92	89	—1,785	.....	...	8,097	189	6,501	.....	78 0 0	
Municipal ditto ...	1	3	3	.....	.....	...	241	.....	241	.....	80 4 9	
Unaided ...	7	547	549	.....	.....	...	23,539	509	23,048	.....	45 14 4	
Total Law Schools ...	14	642	641	—1,785	.....	...	30,877	698	29,780	.....	50 1 7	
<b>II.—Medicine.</b>												
Medical College, Calcutta ...	1	311	430	1,80,124	.....	...	25,067	.....	2,24,191	474 1 7	538 11 2	
Government Medical Schools ...	4	844	843	72,162	.....	...	23,234	10,026	1,14,426	81 12 9	129 11 2	
Unaided Schools ...	4	625	613	.....	.....	...	5,427	890	6,317	...	10 4 9	
Total Medical Schools ...	9	1,780	1,915	2,71,286	.....	...	53,732	10,916	3,44,934	141 1 7	189 1 7	
<b>III.—Engineering.</b>												
Civil Engineering College, Sibpur ...	1	304	293	67,732	.....	...	11,142	.....	78,864	231 1 7	289 1 7	
Government Survey Schools ...	3	605	616	7,230	.....	...	10,676	.....	17,912	17 11 4	29 0 0	
Unaided ditto ...	1	13	13	.....	.....	...	.....	142	142	.....	10 14 4	
Total Engineering Schools ...	5	922	922	74,958	.....	...	21,818	142	96,918	10 4 9	103 1 7	
<b>IV.—Art and Industry.</b>												
Government School of Art ...	1	270	240	25,410	.....	...	6,375	.....	31,785	108 0 0	127 9 7	
Government Industrial Schools ...	4	35	36	2,086	.....	...	.....	2,813	4,899	57 14 4	155 0 0	
Board Industrial Schools ...	8	294	271	1,760	13,631	240	607	11,170	27,408	87 9 7	101 4 9	
Aided ditto ...	11	234	223	1,157	846	387	1,933	4,785	9,166	10 11 4	40 12 9	
Unaided ditto ...	6	242	224	.....	.....	...	.....	7,854	7,854	.....	35 9 0	
Total Art and Industrial Schools ...	30	1,065	1,003	30,413	14,477	627	8,975	26,622	81,114	45 4 9	60 12 9	
<b>V.—Other Schools of Special Instruction.</b>												
Government Schools ...	1	57	44	400	.....	982	.....	8,107	400	.....	9 0 0	
Aided Schools ...	10	255	232	679	52	982	950	8,107	10,730	7 4 9	46 4 9	
Unaided Schools ...	(a)7	389	361	.....	.....	.....	41,140	1,425	42,605	.....	117 14 4	
Total of other schools ...	18	701	637	1,079	52	982	42,070	9,532	53,715	3 1 7	54 4 9	
GRAND TOTAL FOR 1894-95 ...	76	5,114	5,071	3,76,951	14,529	1,000	1,57,472	56,910	6,06,471	77 4 9	119 8 0	
GRAND TOTAL FOR 1893-94 ...	73	4,809	4,697	3,60,729	10,982	706	1,37,327	50,808	5,22,412	78 0 0	111 3 2	

(a) Including the Special Departments attached to St. Joseph's College, Darjeeling.

The variations in the numbers of the students of the learned profession and others are of interest, as follows:—

YEAR.	Law.	Medicine.	Engineering.	Arts and Industry.	Other Special Schools.	Total.
1	2	3	4	5	6	7
1890-91 ...	1,025	1,184	703	753	550	4,215
1891-92 ...	563	1,290	661	853	559	3,926
1892-93 ...	488	1,545	764	915	447	4,159
1893-94 ...	509	1,747	933	1,034	586	4,809
1894-95 ...	642	1,784	922	1,065	701	5,114

The number of law students, that is, those reading for the B. L. examination, the pleadership and mukhtarship classes being excluded, has again increased from 509 to 642, after the marked and sudden diminution in numbers four years ago. The satisfactory increase in the number of students of Medicine, Engineering, Arts and Industry, is still maintained. In 1893-94, including the 35 candidates who passed at the supplementary examination held in July 1894, 98 out of 304 candidates passed the University Examination for the degree of Bachelor in Law; in November 1894 only 68 out of 296 passed, a smaller proportion than before. The extraordinary fluctuations in success in taking this degree have been illustrated in the diagram attached to paragraph 7 of this Resolution. The Director suggests that either the test is becoming more severe, or the candidates come up to the examination less well prepared than in former years.

27. The total number of students of all classes in the Medical Schools throughout the Province is higher than last year; but in some instances the numbers have fallen.

The attendance was greater at the Medical College by 420 to 367, but on the 31st March the rolls showed 311 pupils in 1895, as compared with 317 in 1894: an exceptionally large number, 119, having brought their studies to a close in the session and left the College in despair of qualifying for a degree. In the interests of such unsuitable students, and to prevent the overcrowding of the class-rooms, it has been decided to hold at the end of each session a test examination, such as is held at other educational institutions; the standard fixed is so studiously moderate, that no student of the most ordinary assiduity and ability, need run any risk of failing to gain promotion. Those who fail to pass this examination will have to go through the year's course again, and if they fail a second time, will be removed from the College. They will pay full fees during the year of remand, for the fee-receipts of the Medical College are very low in comparison with the Provincial expenditure (about Rs. 25,000 against two lakhs), and a similar rule prevails in all Arts Colleges and in the Sibpur College.

The numbers attending the Temple Medical School at Patna were lower than last year, and two unaided Medical Schools in the Dacca Division came to an end, so that the returns show lower figures on this account. Last year a hope was expressed that arrangements would be made to open a female class at the Dacca Medical School; this has been sanctioned since the close of the year under report. There were 16 female students at the Medical College in receipt of scholarships of various amounts: and information is afforded of the present employment of 34 passed students of the College, so far as can be ascertained. The erection of a hostel for the female students of the Campbell Medical School, at a cost of Rs. 96,000, was sanctioned during the year. With regard to the Campbell Medical School, the Lieutenant-Governor regrets to hear that Government service continues to be unpopular, and that only one licentiate became a Civil Hospital Assistant. He understands that no more appointments were offered last year, and he is disposed to think that there should be a fixed number of such appointments to be competed for annually. He is informed that one appointment to Government service was made in 1893-94, three in 1892-93, and none in the two previous years. Six were taken from the school in each of the years 1888-89, 1889-90; none in 1887-88; and in the four previous years an average of 14 annually. It is clear that the numbers appointed from the Campbell Medical School have been diminishing greatly of late years. The Inspector-General of Civil Hospitals will be addressed on the subject. Sir Charles Elliott understands also that in 1894-95 only two candidates from the Dacca Medical School received appointments as Civil Hospital Assistants, one in Bengal and one in Assam, and that eight similar appointments were made from the Patna Medical School, viz. three for Rajputana, three for Assam, one for Burma, and one in Bengal.

28. The Sibpur College consists of three departments, viz., the Engineer

Sibpur College. Department affiliated to the University with 97 students, all Hindus, except two Europeans and three Muhammadans; the apprentice or Foreman Mechanic Department, with 207 students, of whom 165 are Hindus, 40 Europeans and two Muhammadans; and the artisan class, newly opened with nine students, eight being native



Christians and one an Eurasian. The total strength of the College on the 31st of March, excluding the artisan class, was thus 304 against 331 (116 engineers and 215 apprentices) of the previous year. The reduced numbers are due to the introduction of a new rule limiting the annual admissions, as the classes in both departments were becoming too crowded for efficient teaching. The demand for qualified apprentices still continues, and all have received employment. The practical training of the students was transferred during the year from the Public Works Department to the Principal; and with this object Rs. 50,000 were placed at his disposal for the erection of new sheds, the transfer of the machinery belonging to the College, and the conversion of half the existing workshops into class-rooms. The transfer has been carried out with economy and with entire success by Mr. Slater, who found excellent practice for his pupils in the work entailed by the change, and thus saved money for purchasing additional machines. Arrangements to teach mining and electrical engineering are also in progress. Mr. Slater was able to pay this year nine visits to the technical schools in the mufassal. The Director states that "experience has shown us that with proper encouragement the young native of good caste becomes a capital workman," but the tendency to substitute surveying for work in wood and iron must be resisted.

29. At the three Government survey schools at Dacca, Patna and Cuttack, the total cost for 616 pupils (average monthly roll number) is Rs. 17,912, of which Rs. 10,976 are recovered from fees and fines, so that each pupil only cost Rs. 29 on an average, of which Rs. 11 were debited to public funds. At Dacca the field work of the second-year class again covered an area of 90 square miles, a cadastral map of the whole tract having been made with the plane-table. The accuracy and value of their work in 1893-94 has been the subject of enquiry, and a final professional verdict on the methods and results has yet to be pronounced. The following proposals have been made for improving these survey schools: that the fee should be raised so as to make the schools more self-supporting: that a certain amount of English knowledge should be required from students more at Dacca, less at Patna and Cuttack: that the course for the first year should be so arranged that students passing through it should be qualified for Government service as amins: that the course be extended for all, or at option, by the addition of some manual work in wood and iron: that the survey schools should be more closely connected with the public offices: that all schools should annually make a cadastral survey. In accordance with these suggestions Government has already ordered the more direct attachment of the schools to the Government offices, so that the complaint may not be made that Collectors appoint untrained men and ignore those trained at the survey schools. The whole subject is receiving the attention of Sir Alfred Croft and of Colonel Sandercock, late Director of Bengal Surveys, and will soon come before Government for final orders.

30. The Art Gallery, attached to the School of Art, was removed during the year from Bowbazar Street to its present site in Chowringhi, between the School and the Indian Museum; all the pictures were carefully examined, cleaned and varnished, and the frames restored. The gallery was opened on the 29th January by Their Excellencies the Viceroy and the Countess of Elgin. The popularity of the school is maintained, the number of pupils varying only from 269 to 270: the total expenditure on the institution has risen from Rs. 31,058 to Rs. 31,785, of which Rs. 6,375 were defrayed by fees and fines: the average cost of each pupil was Rs. 127, of which Rs. 102 were paid from public funds. The character of the work done at the school is the same as last year. The Lieutenant-Governor heard with sincere regret of the death of Mr. W. H. Jobbins, Superintendent of the School, on his way to England in September last. His conscientious labours on behalf of his pupils, his capacity for management and artistic ability, were highly appreciated by Government.

31. The number of industrial schools increased during the year from 26 to 29, and the total number of pupils from 765 to 795. The following quotation from the Director's Report deals with the only matter of recent importance and interest:—

"The only school that demands special notice is the Bihar Industrial School. Arrangements have now been completed for amalgamating the school with the Patna Survey School,



an object which has been long under consideration. The amalgamated school would thus teach a course combining the best elements of both; a fuller course in surveying for those whose work has hitherto been mostly in the carpenter's and blacksmith's shop, and the additional of manual training in wood and iron to the survey school course, together with the introduction of an elementary course in dynamics. It is believed that the pupils thus turned out from the school will be fitted for a much wider range of employment, while for those who show special aptitude, facilities will be provided for admission to the third-year class of the Sibpur college. It is proposed that the school should become a Government institution, the income of the Bihar Technical School Fund, amounting to about Rs. 8,000 a year, being contributed to Government in aid of its expenditure; and that the institution should be called the 'Bihar School of Engineering.' These proposals have now received the sanction of Government."

In connection with the work undertaken by large European schools in preparing pupils for the various departments of the public service, Sir Alfred Croft brings to notice the waste of power involved in the necessary maintenance of separate classes for all the different Government tests; and the Lieutenant-Governor fully concurs with him that it would be an immense relief to educational institutions, as well as to Government officers who have to set papers and allot marks, if measures were taken to assimilate in some degree the examination for admission to different branches of the public service.

32. The main statistics of female education, i.e., the attendance and expenditure in schools for native girls, are shown in the following table:—

CLASS OF SCHOOLS.	Number of schools.	Number on the rolls on the 31st March 1895.	Average monthly roll number.	Average daily attendance.	EXPENDITURE—					TOTAL.
					From public funds.			From private funds.		
					Provincial revenues.	District funds.	Municipal funds.	Fees.	Other sources.	
1	2	3	4	5	6	7	8	9	10	11
Managed by Government ....	2	255	242	163	Rs. 23,603	Rs. ....	Rs. 120	Rs. 6,813	Rs. 302	Rs. 30,838
Ditto by District or Municipal Boards.	3	137	139	79	.....	.....	776	4	.....	780
Aided by Government or by District or Municipal Boards.	2,732	56,662	52,305	39,572	74,328	37,120	10,735	26,554	2,07,911	3,56,646
Unaided ....	479	7,515	6,917	5,254	.....	.....	.....	1,554	15,678	17,212
Total for 1894-95 ...	3,216	64,567	59,003	45,028	97,931	37,120	11,631	34,905	2,23,891	4,05,478
Total for 1893-94 ...	2,999	61,034	56,047	41,748	96,706	31,028	11,452	36,363	2,10,340	3,86,469
Total for 1892-93 ...	2,721	57,579	.....	.....	.....	.....	.....	.....	.....	.....
Total for 1891-92 ...	2,703	54,199	.....	.....	.....	.....	.....	.....	.....	.....
Total for 1890-91 ...	2,238	46,443	.....	.....	.....	.....	.....	.....	.....	.....

In four years the number of girls' schools has increased from 2,238 to 3,216, and of pupils from 46,443 to 64,567, besides 37,553 girls in boys' schools. The net result of the year is a gain of 217 schools and 7,400 pupils. The total expenditure increased during the year from Rs. 3,86,489 to Rs. 4,05,478. The two Government schools are the Bethune Collegiate School in Calcutta and the Eden Female School at Dacca. The Bethune School sent up six candidates to the last Entrance examination, of whom three passed, one in the first division and two in the second; the first gained a first grade junior scholarship. At the Eden Female School three pupils prepared for the Entrance examination; one failed to attend, and the two others were unsuccessful. The Lieutenant-Governor trusts to the Director to make any suggestion that may in due course appear to him to be desirable for the improvement of this school. The system of administration of grants-in-aid to female schools in Calcutta and the neighbourhood was matured during the year, by making certain modifications to the advantage of the schools in the rules previously sanctioned, and by the adoption of a plan to prevent too sudden a reduction in the grants drawn by them. The grants for the present year have been calculated on the results of the examination in the revised standards held in December 1894, and at present

the scheme embraces all the girls' schools in Calcutta and those in the 24-Parganas and Howrah which are under missionary management. Mrs. Wheeler, the Inspector of Girls' Schools, examined *in situ* in Calcutta 45 schools with 3,705 pupils, besides 36 in zannas, and 91 schools out of Calcutta with 3,485 pupils, besides 9 in zannas: total 136 schools with 7,235 pupils. Out of 3,338 pupils examined by her, 2,731 passed, or 82 per cent. Mrs. Wheeler deserves the special acknowledgments of Government for the thoroughness of her inspections. Sir Alfred Croft refers to the following important matter which awaits solution:—"The question of unifying the standards for girls' examinations over the whole Province, and the creation of a separate system of scholarships for those who pass these examinations, has to be taken up at an early date, as the present multiplicity of standards is a puzzle to all new workers in the field, and a source of difficulty to inspecting officers. The Calcutta standards would probably be the best for general adoption; but they require to be supported by a special system of scholarships." He will be desired to submit the subject, as soon as it has been matured, for the orders of Government.

33. The statistics of European education show a break in the continuity of increase for the second time in ten years. The following table for the decennial period is of interest:—

YEAR.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.
1	2	3	4	5	6	7	8	9	10	11
Number of pupils ...	6,098	6,391	6,541	6,681	6,710	6,829	7,088	7,444	7,777	7,940

The number of schools has increased from 72 to 76, and the number of boys at school from 4,264 to 4,271, but the number of girls has sunk from 3,513 to 3,369. The decrease is accounted for by the outbreak of small-pox in Calcutta. The total cost of European education in Bengal fell from Rs. 11,14,962 to Rs. 10,34,478, of which Government paid Rs. 1,75,878 as compared with Rs. 1,82,906 last year. But the total figures are avowedly defective for want of the complete returns. There are 8 aided high schools (6 of those which were classed as high last year having now fallen to the status of middle schools because they sent up no pupils to the Entrance or High School examination) and 7 unaided high schools; of the total number, 4 are at Darjeeling and the rest in the plains. The numbers of the pupils at the schools included in the present return were 1,839 boys and 591 girls, against 1,812 boys and 620 girls in 1894. They sent up 34 candidates (14 boys and 20 girls) to the High School examination, of whom 17 passed (8 boys and 9 girls). In the University Entrance Examination (which is generally preferred by the boys as more likely to lead to appointments), the number of candidates increased from 113 to 117, of whom the successful increased from 73 to 79. The percentage of successful candidates from European schools was 67·5, whereas the percentage of candidates from all classes of schools was 47, showing the marked superiority of European candidates. The total number of middle schools has risen from 36 to 41 containing 1,940 boys and 2,283 girls, against 1,943 boys and 2,412 girls in 1894. The Government Boarding School at Kurseong for boys is to be converted into a girls' school as soon as a new building under construction to accommodate 200 boys is ready. Of the 41 schools, 35 are aided, 5 unaided, and 1 Government. For the Middle Scholarship Examination 30 schools competed, sending up 185 candidates, of whom 177, or 96·7 per cent., obtained passes: this result comparing favourably with that of 1894, when 72 per cent. were successful. There are 20 primary schools (16 aided and 4 unaided) with 396 boys and 495 girls, against 406 boys and 436 girls in the preceding year. For the primary scholarship examination 50 schools and 362 candidates competed, with a percentage of 91·6 passes, as compared with 40 schools and 330 candidates, with a percentage of 82·6 passes, in 1894. European education has therefore done better in every aspect.

34. The new system of grants-in-aid is that all the aided schools in Bengal should receive grants dependent upon the average attendance and the classification of scholars instead of upon examination results, and that frequent supervision by the Inspector

should supersede the annual examination. It was introduced partly in 1893-94, and its working is thus described by Mr. Bamford, the Inspector of European Schools, as quoted by Sir Alfred Croft:—

“The examination of individual scholars was abolished in May 1893 before the examination season for that year had begun. The grants current at that time were calculated upon the results of examinations held in 1892, except in the case of four or five schools examined in February and March 1893. The current grants were continued up to the end of March 1894, when the new rules came into force. It was only to be expected that some schools would have advanced and others gone back between the school year 1891-92 (which really determined the grants current up to March 1894) and the calendar year 1893 (which was the period to which the new rules were applied, when calculating the grants for 1894-95); and the new grants therefore exhibited, when compared with the old, not only those variations which were inevitable in consequence of the change of system by which they were calculated, but also others which resulted from the growth or the dwindling of the schools. The latter cause accounted almost entirely for the cases in which there was a great increase or decrease in the amount of grant, when calculated according to the new rules: so much so, that, although every instance of any considerable decrease was carefully considered, it was not thought that there was any claim for a special grant to be given by way of compensation, and in no case was the diminution of the grant objected to or complained of. The introduction of the new system caused the grants-in-aid to be increased in the aggregate by 6·3 per cent. Of the 56 aided schools, 35 gained increased grants, 18 suffered a loss, and the grants of the remaining three were unchanged. In order to avoid any sudden great variation in the grants, the full introduction of the new system was deferred for a year, the grants for 1894-95 being made up of half the grant earned under the old system *plus* half the grant calculated according to the new.”

The revision of the Code for European Schools in February 1895 by a strong Committee, should lead to considerable improvements.

35. The total number of Muhammadan pupils has varied during the last Muhammadan education. five years as follows:—

				Number of Muhammadan pupils.
1890-91	...	...	...	415,428
1891-92	...	...	...	448,847
1892-93	...	...	...	447,445
1893-94	...	...	...	446,130
1894-95	...	...	...	489,333

There has thus been a gain of 43,203 pupils in the year, the most marked and satisfactory advance yet recorded. The ratio of Muhammadan pupils to the total number of youths under instruction has risen accordingly from 28·8 to 29·8. The cause of this exceptional increase is considered by Sir Alfred Croft to be perhaps mainly attributable to the general agricultural prosperity of the year: he says, “it would not be unreasonable to expect that, in the course of the next four or five years, the proportion of Muhammadan pupils would equal the proportion of Muhammadans in the population of the Lower Provinces, which according to the last census is close upon 33 per cent. But it has been found from experience that the majority of them being agriculturists, the increase or decrease of Muhammadan pupils at school depends chiefly upon the fluctuating state of the crops.” The increase is distributed through all the Divisions and all the districts but two. Tippera again shows a decrease owing to climatic causes. The number of Muhammadan candidates successful at the University Examinations for the last five years is shown as follows:—

	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
1	2	3	4	5	6
Entrance ...	110	85	172	134	153
First Arts ...	16	47	35	31	59
Bachelors of Arts ...	19	14	23	26	17
Masters of Arts ...	2	2	2	0	5

The total number of Muhammadans who passed any examination down to the lower primary rose by nearly one-third, from 4,854 to 6,466. In the

general results of the common examination of madrasas for the last two years (for which the papers were set by a Central Board) 169 out of 252 candidates passed this year, as compared with 162 out of 217 last year, i.e., the results were worse, chiefly at the Dacca, Chittagong and Tippera madrasas. The increase in the number of candidates at Chittagong from 52 to 75 deserves special notice. The Chittagong Madrasa, with 624 pupils, of whom 324 learn English, is now the largest of the madrasas outside Calcutta. The 1,637 pupils at the seven madrasas under Government management (of which the three at Hooghly, Dacca and Chittagong are supported from the the Mohsin Fund, the rest from Provincial Revenues) cost Government Rs. 30,881, out of a total expenditure of Rs. 62,772. At the Calcutta Madrasa the number of pupils in the Arabic Department rose from 360 to 373: but in the Anglo-Persian Department the numbers have fallen from 460 to 322. Owing to the failure in the Entrance Examination of 1894, the whole conduct of the Anglo-Persian Department was subjected to a thorough enquiry, and as it appeared that there had grown up much laxity in teaching and admitting pupils to this department, stringent measures were adopted to check these evils. The immediate consequence of these measures was a considerable number of withdrawals of unfit or doubtful pupils.

36. The number of pupils of aboriginal races decreased by 488 from 35,572 to 35,084, the gain of 445 Christian pupils being more than counterbalanced by the loss of 933 non-Christians. Of these aborigines 20,214 are returned as under tuition in Chota Nagpur, 8,933 being Christians and 16,280 non-Christians. In the Bhagalpur Division there are 6,183, in Burdwan 3,540, and in Orissa Tributary Mahals 1,424 pupils of aboriginal races. The increase of 2,737 pupils in Singhbhum in 1893-94 is largely cancelled by the decrease of 1,831 pupils, chiefly Sonthals, in the same district this year; the partial failure of crops in Dalbhum is the explanation offered. The five missions in Chota Nagpur maintained 182 schools against 163 in 1893-94, with 4,903 pupils, as against 4,729. The total expenditure on these schools increased from Rs. 40,578 to Rs. 43,726, while the Government share of it fell from Rs. 9,338 to Rs. 9,029. The elementary schools for miners' children near Giridih numbered 33 against 32, but their pupils declined from 1,500 to 1,404. These schools are supervised by a Committee, of which Dr. Saise is President; Government bore about half their cost. Three aboriginal pupils passed the Entrance Examination, as against 2 in 1893-94, and 515 others passed the other departmental examinations in the year, as compared with 460 in the previous year.

37. There are a number of private institutions for education scattered throughout the country, which do not conform to any particular departmental standard, but adhere to the traditional indigenous modes of teaching. The figures for the last five years as follows:—

	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
1	2	3	4	5	6
Schools ...	13,387	13,868	13,473	13,602	13,941
Pupils ..	132,057	139,564	134,989	135,530	140,360

The total shows an increase of 339 schools and of 4,830 pupils, so that now the numbers are nearly the same as they were in 1889-90. Many of the schools may be expected to disappear eventually from under the category of indigenous education, when they come under departmental standards and influences.

38. The Sanskrit tols decreased by 54 and the number of pupils by 26. Under the orders of Government, issued in 1893, for the encouragement of indigenous Sanskrit tols throughout the country, these institutions are now carefully looked for, and the annual grant of Rs. 12,240 has been sanctioned for the award of stipends to the teachers and pupils. The total outlay during the year from Provincial



Revenues for the encouragement of Sanskrit learning in tols, amounted to Rs. 17,998 in all, including the sum of Rs. 10,538 paid to tol pupils and their teachers as stipends. At the Sanskrit first examination, 350 passed in 1894 and 408 in 1895: at the second examination 129 passed in 1894 and 196 in 1895.

39. The Central Text-Book Committee consists of 19 members with the Hon'ble Mr. Justice Guru Das Banerjee, M.A., B.L., as President, and the Inspector of Schools, Presidency Circle, as *ex-officio* Member and Secretary.

The Central Text-Book Committee.

Its chief duty is, on behalf of the Education Department, to make its selection out of the very large number of school-books prepared by private enterprise and offered for its acceptance. The Committee dealt with 260 books during the year, approving 122 and rejecting 109: 20 of the remainder awaited disposal at the end of the year, and the rest were beyond the scope of their functions. The authorized list of books for middle schools has passed through the Revision Committee, and is now being examined by the General Committee. It will then remain to prepare authorized lists of books for high and primary schools. Substantial work was also done by the Branch Committees for Bihar and Orissa during the year. The labours of these voluntary Committees are fully appreciated by Government.

40. The Lieutenant-Governor desires again to place on record his great obligations to Sir Alferd Corft, K.C.I.E., for the ability and thoroughness of his work as Director of

Conclusion.

Public Instruction, the wisdom of his advice on all matters on which he is consulted by Government, and the close attention he pays to the administration of his great Department. His long tenure of office has not abated his zeal in the cause of education, while his accumulated experience is of the utmost value to Government. His report, though designedly not so full as last year, leaves nothing to be desired as a record of the year's working. The thanks of Government are due to the Principals, Professors, Inspectors, Assistant Inspectors, and other officers mentioned in the Report.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

*Secretary to the Government of Bengal.*



LABOUR ENQUIRY COMMISSION.

No. 427 T. G.—*The 2nd November 1895.*—The following papers are published for general information.

C. E. BUCKLAND,  
*Secretary to the Government of Bengal.*

GENERAL DEPARTMENT—MISCELLANEOUS.

*Darjeeling, the 2nd November 1895.*

RESOLUTION—No. 431 T.—G.

READ—

A letter from the Secretary to the Bengal Chamber of Commerce, No. 1237, dated the 16th October 1895, requesting Government to appoint a Labour Enquiry Commission.

The letter of the Chamber of Commerce sets forth with clear emphasis the increasing difficulty of obtaining labour for the working and development of the Bengal coal mines and the importance of devising methods for overcoming this difficulty in the interests of a great and growing industry. These questions have been long and anxiously considered by Government, and the Lieutenant-Governor has come to the conclusion that it will be right to accede to the representation of the Chamber and to appoint a Commission of a few gentlemen who possess such experience and practical knowledge that they may be expected to be able to throw some light on the subjects to be investigated.

2. The systems by which labour at present is conducted from the congested districts of Bengal and the North-Western Provinces and from the sparsely populated Division of Chota Nagpur to the districts where it is in demand are two: we have free emigration and we have emigration by recruitment. Free emigration (properly so called) is the system under which labourers leave their homes voluntarily in search of employment; they travel in great numbers to work on the rice and jute harvests of Eastern and Central Bengal, in the jute and cotton mills near Calcutta, on the roads in the lower part of Assam, and on the tea gardens in the Western Duars and the Darjeeling Terai. Many of them on their journeys pass close by the coal mines of Raniganj and Barakar, but they either do not know of the openings there, or are not attracted by them. Emigration by recruitment is the system adopted to supply the Colonies and the tea gardens of Assam, and, in the case of jute mills and perhaps of other forms of industry, it has been used as a precursor of free emigration, in order to start the stream of labour which afterwards flows readily in the channel thus opened. It comprises what is known to the law as "Free Emigration" in the case of the Assam supply, but the term is there used in a somewhat non-natural sense, to distinguish the recruit who is not put under contract till he reaches Assam, from the recruit who starts under a contract. It depends for its success upon a machinery created by law, of recruiters, sardars, local agents and contractors; it is a system open to much abuse, and full of temptations to the agents, who are carefully, though they cannot be effectually, watched and controlled by the executive; innumerable complaints are made against the agents, and numerous convictions for acts of fraud and violence have taken place; and yet the Lieutenant-Governor believes that it is possible to carry on the system fairly and honestly, to the good of the labourer and the employer alike.

3. The main object of the Mining Association and of all who are interested in the coal industry should be to establish a recruiting system in the congested districts, and perhaps also in Chota Nagpur, which shall be free from the abuses and complaints which have given a bad reputation to the recruitment for Assam tea gardens, and which shall gradually and insensibly merge into free emigration to the mining districts when the people of the supply districts learn that the demand for labour is permanent, the wages good, and the life tolerable.

4. In order to effect this object, the first steps are to appoint upright and respectable persons to be labour agents in the congested areas, to

enable them to get into direct communication with the labouring population and to accredit them to the District Officers of those districts in such a way that the intending emigrants may be able to receive assurances from officials whom they know and trust, that the promises held out to them are made *bona fide* and can be relied on.

5. It is essential that the recruiting agency should be altogether separate from Government, but it will be greatly to its advantage to be able to put forth a programme, supported by the report of a responsible body of men and issued under Government authority, showing where the demand is, what is the nature of the work, what the amount of the wages to be earned, and what the conditions of living. Such a report the Commission asked for by the Chamber of Commerce should be competent to draw up. They would enquire into the resources of the supply districts where the labour agents should be located, how they can best set to work to make known to the surplus population the openings which await them, and what methods employed by the agents for emigration to Assam or to the Colonies they should use and what avoid. They would similarly enquire into the wants and conditions of the mining districts, and would give their official *imprimatur* to a prospectus setting forth the nature and attractions of the proffered employment. This is the extent to which, in Sir Charles Elliott's opinion, it is proper and possible for Government to assist those who are interested in the development of the coal industry, by the appointment of a mixed Commission.

6. There is, however, another direction in which His Honour believes that this Commission may by their enquiries lay the foundation of a great and far-reaching reform. He has already indicated how keenly he feels the abuses which have grown up around the present system of recruiting for Assam tea gardens, the unpopularity which, arising thence, attaches itself to service in Assam, and the general failure which has followed the attempts of the Legislature to promote a system of really free emigration into Assam. At present it may be roughly said that every recruit imported into an Assam tea garden costs Rs. 100; the Chamber, in their letter before Government, estimate that the average recruitment of about 50,000 labourers yearly costs the tea industry about 45 lakhs of rupees. On the other hand, the really free emigrant into the Terai or the Duars is said to cost from Rs. 5 to Rs. 10; he sometimes comes from the same district as the Assam recruit, but he comes voluntarily and receives only a small advance which is often recovered from his wages. There is nothing to justify the immensely greater cost of recruitment for Assam. There is only one cause for it—the competition among the recruiting agency; and to this cause also are due the frauds and enticements, the wrongful confinement and violence used, the prison-like depôts, the costly apparatus of guards and establishment, and the frequent reclamations of emigrants who have been entrapped and deceived. It is this competition which has created the *arkati* or unlicensed recruiter, an “outside broker” who trades in coolies and whose interest it is to get the control, lawfully or unlawfully, over a body of labourers, and to run up the price of those labourers so as to secure large and illegitimate profits to himself. It has been repeatedly stated by District Officers, smarting under a sense of these abuses, that they will never be cured till Government takes the whole recruiting work into its hands. This suggestion is impossible, for Government would never consent to go so far outside its proper functions. But Sir Charles Elliott is convinced that an equally efficient remedy would be created if the tea industry could combine to take the whole recruiting work into its own hands. If all the contractors, local agents and recruiters scattered over the country, instead of competing with each other, stealing each other's coolies, and bargaining with different indenters for the highest price for their recruits, were the employés of a central authority, each working in his own defined area, carrying out orders as the employés of the Colonial Emigration Agents do, recruiting the required number and class of labourers at the required time, nearly all the abuses would be removed, and probably three-fourths of the cost of recruitment would be saved. To effect this is a problem of organisation, a difficult problem no doubt, but still one of a type with which the commercial world is familiar, and which ought to be as feasible in India as similar applications of the principle of combination

for a common object have proved to be in other parts of the world. Whether such a scheme is practicable depends largely on the state of feeling and the desire for combination among the members of the Tea Association in Calcutta, and on its influence over the industry generally, and this the proposed Commission will from its constitution be able to ascertain. It is conceivable that the suggested central agency might embrace the system of recruiting for coal mines also, but whether this is so or not, the recruitment for the labour required by the coal districts will not be successful unless it is carried on in the co-operative manner suggested, the local agents working together for the supply of all mines, and not against each other for the supply of individual applicants with adverse interests. If such a principle can be applied to the recruitment for tea gardens in Assam, a great reform will be effected, and the Lieutenant-Governor commends the examination into this suggestion to the careful attention of the Commission. They will understand that only a preliminary, and (so to speak) a superficial enquiry into the possibility of such an agency is expected from them; in order to investigate it completely, the Administration of Assam will have to be associated in the enquiry, and such a fuller investigation is beyond the scope of the Lieutenant-Governor's authority, and must be placed in the hands of the Government of India.

7. To sum up, the following are the duties with which His Honour considers that the Commission should be charged:—

- (1) to ascertain the extent of the labour requirements of the coal-mining industry, and the reason why, up to the present time, the employers of labour have not succeeded in getting a sufficient supply of it;
- (2) to ascertain the present condition of the districts (or parts of districts) in which the coal mines of Bengal are situated, as regards their healthiness, natural advantages, density of population, means of communication, and the general industries of the people;
- (3) to ascertain the actual terms and conditions under which wages are earned and paid at the coal mines, as well as the collateral inducements offered by the coal industry to those who will work upon the coal-fields, including travelling expenses to and from the mines, house accommodation, water-supply, the propinquity of bazars and post-offices, holidays and leave allowances, subsistence during sickness, the provision of medical comforts, hours of labour, and the provision for new labourers when learning their work;
- (4) to propose the best means by which the advantages of the mining districts may be made known to the inhabitants of the congested districts of the North-Western Provinces and Bihar;
- (5) to ascertain the best systems under which labourers may be induced to proceed to the mining districts and from what classes of the population such labourers should be drawn.

Lastly, and with special reference to what has been written in paragraph 6, to consider the question of the possibility of establishing one central agency through which alone all labourers, whether for coal-mining, tea-growing, or any other purpose, except colonial emigration, should be recruited, and, if this is possible, what the nature, constitution and powers of such an agency should be.

8. The Commission will consist of the following gentlemen:—

H. C. Williams, Esq., c.s.	...	...	...	President.
Surgeon-Lieutenant-Colonel D. W. D. Comins, Inspector-General of Jails	...	...	...	Members.
One gentleman to be named by the Bengal Chamber of Commerce, one by the Indian Mining Association, and one by the Tea Association	...	...	...	
One native gentleman experienced in questions relating to coal mining	...	...	...	

They will begin to sit early in December, as soon as Mr. Williams is relieved of the officiating charge of the Burdwan Commissionership.

9. The President of the Commission will settle the date of the meeting of the Committee in Calcutta, and be entrusted with the statistical work, and will lay it, when obtained, before the Commission.

Such documents as may be needed for reference will be laid before the Commission by the President.

10. Mr. H. C. Williams will be placed on special duty for the purpose, and will receive a deputation allowance of Rs. 10 a day under article 98(a) of the Civil Service Regulations, in addition to the salary which he would draw in the regular line and the travelling allowance admissible under the rules. The services of Surgeon-Lieutenant-Colonel Comins will be lent to the Commission in addition to his own duties, unless it is found that for a short time it is necessary to place him on special duty for purposes of inspection. The other members of the Commission will be allowed their actual travelling expenses. The cost of the Commission will be met from Provincial Revenues.

11. As the enquiries of the Commission into the points connected with the condition of the supply districts will extend into the Benares and Fyzabad Divisions, and possibly elsewhere, the North-Western Provinces and Oudh Government will be asked to allow the President to correspond direct with any District or Divisional authority in the united Provinces.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Secretary to the Bengal Chamber of Commerce for information, with the request that the Chamber will be good enough to nominate, in consultation with the Indian Mining and the Tea Associations, three gentlemen to represent them on the Commission.

Ordered also that a copy of the Resolution, and of the letter of the Bengal Chamber of Commerce, be forwarded for information to—

- (1) H. C. Williams, Esq., c.s., Officiating Commissioner of the Burdwan Division.
- (2) Surgeon-Lieutenant-Colonel D. W. D. Comins, Inspector-General of Jails, Lower Provinces.
- (3) The Appointment Department of this office.
- (4) The Financial Department of this office.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

*Secretary to the Government of Bengal.*

No. 1237, dated Calcutta, the 16th October 1895.

From—S. E. J. CLARKE, Esq., Secretary, Bengal Chamber of Commerce,

To—The Secretary to the Government of Bengal, Financial Department.

THE Committee of the Chamber of Commerce desire me to bring to the notice of His Honour the Lieutenant-Governor an important subject which has long had their close attention, and in which the commercial community would be glad to have the assistance and counsel of the Government. It is the supply of labour, not only to the tea districts, but also to the expanding coal industry. The Committee have set on foot certain enquiries, but the more closely they have studied this question, the more convinced they have become that it involves an investigation, as a result of which the Chamber would have of necessity to approach not only the Government of His Honour, but also other Local Governments. This last course could only be adopted by addressing those Governments through the Government of Bengal. It might also well happen that the Chamber, as a result of its investigations, might have to solicit the good offices of His Honour's Government to give administrative effect to such conclusions as might be arrived at, whether those conclusions affected the Province of Assam, or the supply of labour from the congested districts of Bihar and the North-Western Provinces. Under these circumstances, it has occurred to the Committee that it would perhaps save time, and also advance the object the Chamber has in view, if the Committee at once suggested to His Honour the appointment of a Commission to consider the question of the supply of labour. Proceeding one step further, they would respectfully ask to be excused if they venture to suggest that, considering the practical acquaintance which Mr. H. C. Williams, c.s., has obtained of the labour question,



as an officer who has served in Assam as well as in Bengal, and who has recently been Chairman of the Mines Commission, His Honour might consider that that gentleman might usefully undertake the investigation now suggested by the Chamber, as President of a joint Commission of enquiry into the supply of labour.

The Committee think that, whilst they refrain from going at length into the questions that have come before them in connection with the supply of labour, they may yet indicate to His Honour the importance of the suggested enquiry and their reasons for soliciting that Government should assist to conduct it to a successful issue.

For many years the merchants in Calcutta interested in tea have formed amongst themselves labour supply agencies intended to control recruiters and to secure for tea gardens the labour they might need. In fact, in 1891 efforts were made to form a labour supply association working in connection with the Chamber of Commerce, but operating under its own rules, and intended to concentrate and control those agencies which now supply labour, and of which occasionally there are loud complaints. One of the objects of the association would have been to encourage to the utmost extent free emigration to Assam. Unfortunately, the scheme fell through. Since 1891 the coal industry has made large and increasing demands on the fields of labour hitherto chiefly resorted to by the tea industry. The growth of an export trade in coal, and the increased demand for mineral fuel owing to an increase of industrial works, has taxed the local resources to their maximum, leaving the coal mines of Bengal far short of their required labour force. The present supply of labour is below the requirements of the mines, and the labourers are in consequence too independent for steady work. Wages are so good that the mining population has no incentive to regular and steady employment: it shows a tendency to work by fits and starts—a tendency that can only be cured by the opening to coal-owners of a new source of labour supply equal to their demands for workpeople. At the same time, there is a large and constant demand for labour to be employed on tea gardens. The tea industry is also expanding, so that for many years it may be anticipated that the requirements in this direction are likely to increase rather than to exhibit a falling off.

But because competition for a scanty supply of labour of a particular class or kind is undesirable, the Committee are anxious to see the coal-fields supplied with a sufficiency of labour flowing to the mines without the intervention of a class of persons occupying the position of professional recruiters. One of the principal objects the Committee have in view in addressing His Honour on this subject is to prevent, as regards coal mines, a recurrence of what has taken place in connection with the supply of labour to tea gardens.

On going into the matter, the Committee discovered such an anomaly as the following, that whilst labourers from Bihar and the North-West are few in number at the Bengal collieries, men from Oudh and the North-West resort somewhat freely to the mines at Wardah in the Central Provinces. At the Bengal collieries this class of labourer exhibits several peculiarities which place them at a disadvantage as regards the Sonthalis. This there is no reason to suppose they will not overcome. And there can be no doubt that the North-Western Provinces do offer to those requiring labour a large and promising field of supply. The difficulty is how to tap this field, and it is here that the Committee consider the matter is one rather to be dealt with by Government than by an independent commercial agency.

As regards the coal-fields and their supply of labour, the Committee may perhaps usefully contrast the density of population in the districts near the mines with that of the more congested districts of Bengal and Upper India:—

*Density of population per square mile.*

Recruiting Districts.		Bengal and Bihar.		Upper India.	
Manbhum	... 288	Saran	... 950	Benares	... 912
Hazaribagh	... 166	Muzaffarpur	903	Jaunpore	... 810
Lohardaga	... 158	24-Parganas	898	Ballia	... 805
Singhbhum	... 143	Hooghly	... 880	Azamgarh	... 805
Palamau	... 122	Dacca	... 865	Lucknow	... 800
Sonthalia	... 821	Patna	... 852	Ghazipore	... 787
Birbhum	... 455	Darbhanga	840	Gorakhpore	... 654
Bankura	... 405	Faridpur	792	Bareilly	... 652



This table serves to show that the districts adjacent to the coal-fields are not capable of supplying the labour needed by the mines, whilst there are certain tracts in Bengal and Upper India where variety of employment, new sources of earnings, would be the greatest boon that could be conferred upon the people.

It is difficult to settle with precision the money wage of agricultural labourers. Where population is dense, wages are low, and the collateral advantages offered, such as a supply of cloth, concessions of grain, and so on, are few, if indeed they are not entirely absent.

Turning to the valuable and interesting tables issued by the Statistical Bureau of the Department of Finance and Commerce, the monthly money wage of an able-bodied agricultural labour in 1894 varied as under:—

Assam	...	...	...	...	Rs. 6 to Rs. 10.
North-Western Provinces	...	...	...	...	Rs. 4 to Rs. 6.
Oudh	...	...	...	...	Rs. 1-14 to Rs. 4.
Bengal	...	...	...	...	Rs. 8-12 to Rs. 7-8.

These figures illustrate the fact that, where population is densest, wages descend to starvation point. They show that an able-bodied agricultural labourer can, in Oudh, earn from one anna to two annas one pie, and in Bengal from two to four annas, per day.

In the mining district the fixed wage may be taken at about the higher wage given in Bengal, and such a wage may be earned by new and untried labourers. The work, however, is usually done by the piece or by contract, and the wage therefore cannot so easily be stated at a monthly sum. The information before the Committee shows that working by contract or by the piece, a miner, without greatly exerting himself, can earn eight annas a day, while, if he choose to work steadily and with fair perseverance, there is nothing to prevent his increasing his wage to twelve annas or even more daily. In like manner, piece work on a tea garden is highly remunerative to the labourer, though it is difficult to reduce it to a monthly standard of earning. Sufficient has been said to show that, expressed as a monthly wage, the earning of a tea garden cooly or a labourer in the Bengal mines is far in advance of the average earning of an able-bodied labourer in either the Bengal Provinces, the North-Western Provinces, or Oudh; and this without referring to those important collateral advantages enjoyed by workers on tea gardens and at the mines of free house accommodation, free tools, free medical attendance and medicines, purer water, cheap supplies of grain, or other facilities for purchasing necessities and even small luxuries. This being so, it may seem strange at first sight that the people of the congested districts, even allowing for the attraction which the land has for all natives of India, should be content to subsist on so small a wage, whilst industries in the same or the neighbouring province should be crippled for want of labour. The only explanation which occurs to the Committee as being probably near the truth is that in the North-Western Provinces the existence of, say, the coal mines in Bengal and a comprehension of the rate of wage to be earned there, are practically unknown. In bringing this necessary information home to the people and to facilitate the movement of those of them who may desire to improve their condition, the officials of Government may lend most useful aid.

And here the Committee may remark that their experience bears out the testimony of Mr. Forbes, Commissioner of the Patna Division, as to the movement of petty cultivators and able-bodied labourers from Bihar to the eastern districts of Bengal, where they help to harvest the jute and rice crops. Harvesters are also drawn from Oudh and the North-Western Provinces. These men remit money to their homes and return in time for the winter and sowing cultivation of their own villages. Such a movement has more than merely local importance. It deserves to be not only encouraged, but stimulated. Used judiciously, it may, in conjunction with improvements in the communications with the tea districts, lead ultimately, not only to the establishment of a valuable supply of season-labourers for tea gardens, but also to a steady influx of permanent settlers.

To turn to some minor points of the question, the Committee do not overlook that one result of a steady supply of labour to the coal districts would be a gain to the State from the larger mineral earnings of the East Indian

Railway. Again, with a larger and cheaper output of coal, the export trade of coal from Calcutta might be expanded to probably ten times its present proportions. An export of from three to five millions of tons of coal per annum would be a very practical and effective way of minimising the burdens now imposed upon the general trade of the port by the charges connected with, or arising from, wet docks at Kidderpore.

The Government of the North-Western Provinces is understood to be willing in the interests of the population of the congested districts of those provinces to lend its aid to encourage labourers to resort to the coal-fields of Bengal, where an income much in excess of that obtainable near their homes can be secured. But if this source of supply is to be worked at all, it should be worked upon a system approved by the Government of Bengal as well as by the Government of the North-Western Provinces, to ensure that the most economical and desirable methods are adopted in the interests alike of the labourers and the mines.

The Committee have shewn that there is an urgent need of an increased labour supply to the coal-fields. As regards Assam, the Census Report of the Province gives 39,000 per annum as the number of persons needed to keep up the rate of increase of residents born outside the Chief Commissionership. This statement, however, if accepted as a measure of the yearly reinforcement of the labour supply for the gardens, would give a wrong idea of the real proportions of the labour demand of the tea industry. The report on labour immigration into Assam gives the totals for Act adults (sardari and contractor's) non-Act adults, and children as under:—

1889	...	55,658	immigrants into Assam.		
1890	...	36,080	"	"	"
1891	...	49,908	"	"	"
1892	...	56,050	"	"	"
1893	...	50,675	"	"	"
1884	...	42,519	"	"	"

This makes an average, for the six years, of 48,448.

When, however, it is remembered that Assam Proper is a province with an area of nearly 21,000 square miles, and a scanty population of about  $2\frac{1}{4}$  millions, and that out of a total for all India of 138 million pounds of tea it produces  $97\frac{1}{4}$  million pounds, it may be inferred that immigration is far below the requirements of the province. The majority of the great column of close upon 50,000 immigrants into Assam are imported therein at the expense of the tea industry. The estimate of this outlay approaches the serious total of Rs. 45 lakhs per annum, which again may be taken to be about ten per cent. on the cost of production. The mere statement of such a fact as this shews what an enormous tax the import of labour is upon Assam tea. At the same time, it discloses a state of things which, in the opinion of the Committee, makes the appointment of such a Labour Commission as they have suggested not only desirable, but a necessity. For this costliness of imported labour is in a large degree due to the artificial difficulties placed by the system of recruitment in the way of securing labourers for the tea industry—difficulties which, the Committee would hope, a Labour Enquiry Commission might find means to remove.

Having thus placed the matter before His Honour the Lieutenant-Governor, the Committee of the Chamber of Commerce trust that His Honour will believe it is only a conviction of the urgency of the labour problem which has led them to solicit, as they now do, his sympathy and assistance.

BENGAL SANITARY DRAINAGE BILL.

No. 3791S.—*The 5th November 1895.*—The following correspondence is published for general information.

H. H. RISLEY,  
*Secy. to the Govt. of Bengal.*

Dated Calcutta, the 8th August 1895.

From—RAI RAJKUMAR SARVADHIKARI BAHADUR, Secretary, British Indian Association,

To—The Secretary to the Government of India, Home Department.

By desire of the Committee of the British Indian Association, I have the honour to submit, for the consideration and orders of His Excellency the Viceroy and Governor-General, the following representation regarding the Sanitary Drainage Bill passed by the Council of His Honour the Lieutenant-Governor of Bengal for making Laws and Regulations on the 3rd instant.

From its very inception the measure was regarded by the public with anything but approbation. It was looked upon with disfavour by most of the public bodies, officers of Government and other gentlemen who were consulted about it, and several of the responsible officers of Government who could speak with authority on the subject condemned it in no equivocal terms. Mr. Cooke, Magistrate of Hooghly, who has the largest experience of drainage works by reason of most of such works having been executed in the district under his charge, said that—"Drainage works under Act VI are not altogether satisfactory precedents for Government interfering as public benefactors, and if alluded to, should be quoted rather as warnings than as examples." Instead of multiplying instances the Committee of the Association beg to quote what His Honour Sir Charles Elliott himself said in his public address at Dacca in July 1894:—"The present Bill was therefore drawn up and had been widely circulated for criticism amongst members of municipalities, Boards, officials and many others, whose opinions are likely to be of value. Many replies had been recorded and others are still coming in, and His Honour said he had to confess that most, if not all of them, were hostile to the Bill."

It is only a natural result of its character that the measure has not commanded public support. The science of sanitation is new even in the country of its origin. In Bengal the climate and the physical conditions of the country are factors which remove the province from the operation of conclusions derived from experiments in European countries. Then, again, the institutions, habits, and modes of living of the people of Bengal strengthen the differences arising from climatic and geographical conditions. It is reasonable therefore to doubt whether measures, recommended as useful in Europe, would prove beneficial to the inhabitants of Bengal. This doubt has been strongly fortified by what responsible officers of Government themselves have said about the causation of disease in Bengal. In reviewing the Report of the Drainage Obstruction Committee, Mr. A. Mackenzie (now Sir Alexander Mackenzie), Secretary to the Government of Bengal, said: "Dr. Lethbridge is unable to accept the view that the dampness of the sub-soil could be the sole and only cause of the fever, or that this dampness, which is general in Lower Bengal, had been brought about by roads, railways, &c." Another officer, Colonel Haig, stated: "I have seen villages situated on high ground from which the levels sloped away gradually in all directions for a mile or two, and within which there was not in the month of January, and plainly could not be at any other time of the year, a vestige of a swamp; yet this had all had the fever, all had a dismal tale of suffering to tell. It is vain therefore in my opinion to look for the origin of the fever solely in the swamps, great and small, scattered over the country."

The truth is that it is not obstructed drainage and the dampness of the country so much as the poverty of the people which should account for the high rate of mortality which is said to obtain in some districts in Bengal. The consensus of professional opinion should leave no doubt on the point.

In 1886 Dr. Coates, Sanitary Commissioner with the Government of Bengal, observed in his annual report: "Outbreak of cholera in different districts throws no new light on the etiology of disease. It is owing to water-supply, impure and insufficient, inhabitants enfeebled by exposure, insufficient clothing, scanty and unwholesome food." Another eminent officer, Dr. Saunders, while Deputy Inspector-General of Hospitals, observed: "And now as to causation, Dr. Elliot has in his report given a very fair *resumé* of the views which have been held on the subject, and he has pointed out how sanitation, or the absence of it, defective drainage, supersaturation of the soil, &c., exist in many places where fever has not been markedly prevalent, and that where supposed causes are not apparent, yet that disease has been rife and excessively fatal." Dr. Saunders ascribes the lowering of the health of the people to "the total absence of all conservancy, the almost total want, at certain seasons, of proper clothing, the overcrowding in their dwellings, the almost invariable corruption of water-supply, the insufficiency of their food (looked at as nutriment), and all other conditions which I have alluded to on a former occasion."

It is therefore inevitable that the public, and the influential section of the public represented by the Association, should view with apprehension and anxiety such a measure as the Sanitary Drainage Bill. It involves the imposition of additional taxation for recovering the cost of works undertaken in compliance with its provisions. And it imposes an increase of burden upon the people of this province—a people suffering already from a failing stamina and inability to resist morbid influences, and upon whom any new burden must have a disastrous and injurious effect. The alarm is the more widespread, as there is no limit to the cost of such works and to the rate which may be levied for recovering such cost. The Committee of the Association beg to submit that in their present impoverished condition, both landholders and raiyats must feel the imposition of additional taxation upon them as an act of grievous oppression which, instead of benefiting them, must reduce their means of maintaining themselves, of providing themselves with proper food and clothing, and of paying for medical aid and medicines when necessary, and thus predispose them more to the attacks of the fever against which the drainage work is intended to be a protection.

Irrespective of all other considerations no justification for the measure exists even on the ground that it is necessary for the purpose of removing a defect in the Statute Book. There are already in the Bengal Code several Acts—the Road Cess Act (section 109), the Drainage Act, 1880, the Embankment Act (section 79), and the Local Self-Government Act (section 87)—which provide for the execution of drainage works for the purposes of sanitation and improvement of land.

But not the least objectionable feature of the Bill is its provisions for the recovery of the cost from persons interested in the land and for its apportionment on the basis of the road cess. It is not only persons that are in immediate possession of land either as proprietors or tenants, and whose benefit is intended by a sanitary drainage work, who would have to pay, but also all proprietors of superior grades living at distances from the scene of operation, and who would be quite unaffected by the work. Landlords, who have let out their estates in permanent tenures and have no direct connection with the land, would have to bear a share of the cost, while merchants, traders, manufacturers, artisans and others, who would be benefited in a sanitary point of view, would have to pay nothing at all. This would be a new imposition on land and an increase of the land revenue in opposition to the pledges given in 1793, and in a way which admits of no justification whatever. The Committee of the Association would respectfully submit that it has been held by such eminent lawyers as Lord Bramley, Sir Erskine Perry, and Sir Barnes Peacock that any imposition which reduces the profits of landholders in the permanently-settled provinces is a breach of the conditions on which the settlement was made, and they would humbly ask whether it is a wise and sound policy to enact a legislative measure which is unnecessary and of doubtful utility, which must seriously shake the confidence of the people in solemn pledges given by Government, make them brood over wrongs repeatedly done them by breaches of vested rights, and tend to create disaffection and a sense of helplessness.



Too much importance cannot also be attached to the way in which the Bill was passed. His Honour the Lieutenant-Governor said from his place in Council on the 20th ultimo that "another reason for deferring the final passing of the Bill is that we leave an opportunity for two mufassil Members of the Council who have not yet been elected to give us the benefit of their opinion in the matter." But although one of the Members has not yet been elected, and although motion was made to allow the Bill to stand over for three months, the motion for passing it was allowed and carried by a majority of three, even though all the elected hon'ble Members and one appointed hon'ble Member, strongly opposed the passing of the Bill.

For the above reasons among others, the Committee of the British Indian Association respectfully solicit that His Excellency the Viceroy and Governor-General may be graciously pleased to withhold his assent to the Sanitary Drainage Bill.

No. 280T.M., dated Darjeeling, the 31st August 1895.

From—H. H. RISLEY, Esq., C.I.E., Secretary to the Government of Bengal, Municipal Department,

To—The Secretary to the Government of India, Home Department.

I AM directed to forward, for submission to His Excellency the Viceroy and Governor-General, a representation from the British Indian Association, praying that His Excellency may be moved to withhold his assent to the Bengal Sanitary Drainage Bill. I am at the same time to offer, for His Excellency's consideration, the following observations on the arguments put forward by the Association.

2. The Bill, as the Government of India are aware, was based upon a

\* "That when an application is made to Government on the part of the inhabitants of any tract where malarial fever prevails, or when it is notorious that there is a high rate of mortality due to the want of drainage, provision shall be made by law for ascertaining the wishes of the majority of the inhabitants or owners of the property concerned, as represented by the District Board, and if the majority support the scheme, the Government shall be empowered to carry out comprehensive schemes of drainage, and to raise from the area affected such funds as may be necessary for meeting the cost of such schemes."

Resolution\* adopted unanimously by the members of a Conference held at Belvedere on the 25th July 1892 to consider what legislative action should be taken in order to promote the improvement of water-supply and drainage in towns and rural tracts in Bengal. The Conference comprised 5 official and 9 non-official members, and the latter were representative men, having special experience of the subjects under consideration. In the course of the discussion of the Resolution, it was urged by Babu Surendranath Banerjee that the existing law had been found insufficient, and that it was essential that the initiative should rest with the Government. If this was not provided for by law, he was afraid that in the vast majority of cases, nothing would ever be done. He added that nearly all of the persons consulted by him in various parts of Bengal were in favour of compulsory legislation. Accordingly, in section 3 of the Bill, which was submitted to the Government of India with Mr. Bourdillon's letter No. 64T.M. of the 6th September 1893, the Local Government was empowered to take action either of its own motion, or on the representation of the Magistrate of the district, or on an application made to the Magistrate by the District Board. In view, however, of the opposition with which the Bill was received, the Lieutenant-Governor caused its provisions to be altered so that, in the measure recently passed by the Council, not only does the power of initiating and rejecting schemes reside solely in the District Board, but if a scheme is modified by the Government so as to increase its cost, it must be referred back to the District Board, which has the power of rejecting it. Further than this it was impossible to go without abandoning the Bill altogether, and with it all hope of taking any effective action against the prevalent malarial fever which for the last twenty-five years or more has been generally ascribed to obstructed drainage.

3. The allegation made in the third paragraph of the Association's letter, that European experience can throw no light on the prevention of malaria in India, hardly deserves serious discussion. It is a matter of common knowledge that the causation and symptoms of malaria are the same all over the world, and if the removal of obstructions from drainage has been followed in Europe by the



cessation of fever, it is a reasonable conclusion that the same cause will in this country produce the same effect. As was pointed out in the debate in Council when the Bill was passed, the special value of the experience gained in Europe is that it brings out more clearly than is possible in this country the intimate connexion that exists between obstructed drainage and malarial fever. Until a few months ago, no native of Bengal ever dreamed of disputing this connexion. In fact the Drainage Obstruction Committee of 1877, which is referred to in this paragraph of the letter, was appointed to enquire into particular instances adduced by Raja Digambar Mitter, C.S.I., in support of his theory, that the sole cause of the epidemic fever which had prevailed near Calcutta lay in obstructions cause to the natural drainage of the country by the construction of railways, roads, and embankments. The reference in the Association's letter to the Government Resolution on the report of the Committee is, moreover, incomplete and misleading. The passage of which a portion is quoted runs as follows:— "Dr. Lethbridge, while unable to accept the view that dampness of sub-soil could be the sole and only cause of the fever, or that this dampness, which is general in Lower Bengal, had been brought about by roads and railways, yet thought that while inquiring into the causes of the dampness in the tracts subject to the epidemic fever, which was an admitted factor in the production of the disease, the Committee might set itself to devise a general scheme for providing sufficient drainage for this tract, and he suggested that the engineering element on the Committee should be strengthened for the purposes of an inquiry of this nature."— It is clear from this that, so far from holding that obstructed drainage was not one of the causes of malaria, Dr. Lethbridge, who was then Sanitary Commissioner, was so convinced of the intimate connexion between the two that he proposed to apply the very remedy that is contemplated in the present Bill—only on a much larger scale. The Resolution itself can certainly not be appealed to in support of the position now taken up by the British Indian Association. It was stated in paragraph 3 that although the facts ascertained by the Committee did not bear out Raja Digambar Mitter's theory so far as the particular instances referred to by him were concerned, neither did they disprove the position that the saturation of the sub-soil was one chief cause of fever, and that this saturation had been aggravated by both natural and artificial changes. And in the next paragraph Sir Ashley Eden's Government undertook to render assistance by every means in its power in cases where drainage could be improved by manageable local schemes, and where those benefited were willing and able to pay for the necessary works. It undertook, in fact, to do of its own motion precisely what the present Bill proposes to get done through the principle of local option. Only where the present Bill contemplates the distribution of the cost over a long term, and its equitable apportionment by a self-acting process among all persons who are benefited by a scheme, the Government of that day proposed to recover the cost from the zamindars and tenure-holders alone, and actually did so recover a large portion of the cost of the Dinajpur Drainage Scheme.

4. The quotation purporting to express the opinion of Colonel Haig, formerly Chief Engineer, Bengal, in the Irrigation Department, is taken from a note dated 27th February 1873, on the drainage and water-supply of the Hooghly district. Colonel Haig's views on the causation of the outbreak of malaria, then known as the Burdwan fever, are stated at great length, and cannot be summarised here. But the following passage shows that his authority cannot be appealed to in support of the doctrine that obstructed drainage has nothing to do with malaria:—"To sum up. I am of opinion that irrigation should be combined with drainage, that without it the full benefit of any drainage scheme could not be obtained, while the difficulties of carrying it out would be considerably greater. I further am inclined to think irrigation of at least equal importance with drainage, but that it should be introduced tentatively and with caution."

5. The reference to Dr. Coates's opinion contained in paragraph 4 of the letter cannot be traced. In 1886 Dr. Coates was not Sanitary Commissioner of Bengal. He held that appointment, however, in 1878, and in paragraph 89 of the Report for that year he observed: "The great remedy for fevers is drainage, which in a large deltaic country, where the banks of the rivers are higher, as a rule, than the intervening country, is specially difficult and

expensive." As regards Dr. Saunders, it will be sufficient to point out that in paragraph 68 of his report of May 1872, from paragraphs 17 and 32 of which the passages quoted by the British Indian Association are taken, this officer, when stating the preventive measures that should be adopted against malarial fever, wrote as follows:—"In the first place, I would point out the necessity of draining all jullahs and swamps in the districts where fevers have prevailed. Secondly, I would also open out again the old silted-up drainage channels, and, where needed, dig new ones." \* \* Dr. Saunders therefore certainly entertained no doubts as to the connection between malaria and obstructed drainage.

6. With reference to the allegation contained, and the arguments used, in paragraphs 3 and 4 of the Association's letter, I am to invite attention to the annexed copy of a letter from Surgeon-Colonel R. Harvey, Inspector-General of Civil Hospitals, Bengal, No. 8267, dated the 18th September 1894, and its enclosures, which deal exhaustively with what may be called the medical aspects of the Bill, and state clearly and convincingly the grounds for holding that drainage is an effective remedy for malaria, whether in Europe or elsewhere.

7. The description of the Bill in paragraph 5 of the letter as a measure imposing additional taxation involves a complete misconception of its provisions and of the manner in which it is likely to be worked. On this subject contradictory opinions were expressed by the opponents of the Bill while it was passing through Council. Babu Surendranath Banerjee was confident that no District Board would propose any scheme involving the imposition of a cess, while Babu Guru Prosad Sen apprehended that they would be led by the influence of their nominated members to propose and carry out schemes against the wishes of the people concerned. In the Lieutenant-Governor's opinion, the former gentleman under-rated the good sense and the latter the independence of the District Boards. The Bill gives them ample discretion, and Sir Charles Elliott believes they may be trusted not to abuse it.

8. The reference to existing Acts in paragraph 6 of the letter may be readily disposed of. It is true that where District Boards have been constituted the road cess forms part of their general income, and that they may undertake drainage schemes under section 79 (not section 87) of the Local Self-Government Act. But the growing demands on these District Funds render it unlikely that any Board will be able to undertake a comprehensive scheme, unless the locality benefited can be made to bear a substantial proportion of the charge. The Drainage Act has for its object the improvement of land for agricultural purposes, and, even if this were not so, it would be unfair to make use of its provisions to introduce schemes of sanitary drainage, because it throws the whole cost on to the landlord. The same may be said of the Embankment Act, section 7 (4) of which enables the Collector to make any sluice or water-course or to alter any public water-course for the improvement of the public health, while section 54 empowers him to levy the entire cost from the zamindars of the estates concerned, leaving them to recover from their subordinate tenure-holders the proportionate sums allotted on them. The fact that the Association should seriously contend that these enactments meet all the requirements of the case throws into relief the superficial character of their objections in the following paragraph to the apportionment of the cost of drainage schemes on the basis of the road cess. On the principle advocated by the Association, the cost would be levied from the landlords and superior tenure-holders only; on the principle adopted in the Bill, it is distributed among all grades of agriculturists in proportion to their interest in the land.

9. Much stress was laid, both in Council and in the Press, on the argument referred to in paragraph 7 of the letter, that persons unconnected with agriculture, but residing in a rural area affected by a drainage scheme, would benefit by the improvement in the healthiness of the locality, without contributing to the cost of the scheme. One of the leading newspapers went so far as to say that in Bengal agriculturists were barely half of the entire population. In fact, however, the figures given at page 276, Volume III of Mr. O'Donnell's Census Report for Bengal, show the rural population of Bengal to number 67,903,111, of which 44,510,936, or 65·5 per cent., are counted under Class B, Order V, as being employed in agriculture. To this should be added the rural labourers numbering (page 283) 7,888,380, which raises the proportion of

agriculturists to 77·1 per cent. Even this, however, really understates the case, for the simple reason that people whose caste occupation is non-agricultural, but who also cultivate, are apt to be recorded as non-agriculturists. The records of the Muzaffarpur settlement and other settlements recently completed in these provinces show that virtually the entire population is more or less interested in land, and therefore, through the machinery of the road cess, will contribute to the cost of drainage schemes. The point was carefully considered by the Select Committee, and it was found impossible to devise any means of compelling non-agriculturists resident in rural areas to bear a share of the cost of drainage schemes without introducing a special machinery for assessment quite out of proportion to the end in view, which the figures referred to above, and more especially the settlement records, show to be one of merely nominal importance.

10. The time-worn argument that the Bill involves a breach of the Permanent Settlement may be dismissed in a few words. It amounts to a claim on the part of the landholders that their lands should be drained for them and that some one else should pay the cost. It ignores the fact that the drainage rate is in no sense a regular tax, but a charge which will be imposed, if imposed at all, on the motion of the people themselves as represented by the District Board, and that it will only be levied for a period of thirty years. And finally it leaves out of account the Duke of Argyll's despatch of 12th May 1870, which ruled once for all that the levying of rates upon the holders of land for local expenditure involves no breach of faith on the part of the Government.

No. 1966, dated Simla, the 24th October 1895.

From—J. M. MACPHERSON, Esq., Officiating Secretary to the Government of India,  
Legislative Department,

To—The Secretary to the Government of Bengal, Municipal Department.

I AM directed to acknowledge the receipt of your letter No. 280T.M., dated the 31st August 1895, addressed to the Secretary to the Government of India, Home Department, forwarding a representation from the British Indian Association, Calcutta, dated the 8th idem, praying that His Excellency the Viceroy and Governor-General may be moved to withhold his assent to the Bengal Sanitary Drainage Bill, and to request that, with the permission of His Honour the Lieutenant-Governor of Bengal, the memorialists may be informed that His Excellency the Viceroy has considered their representation and has seen no reason to withhold his assent to the measure.

From Secretary, People's Association, Faridpur,  
dated 19th September 1895.

From Secretary to the Barisal People's Association,  
dated 20th September 1895.

From Secretary to the Rajshahi Association, Bengal,  
dated 21st September 1895.

From Assistant Secretary to the Murshidabad  
Association, dated 29th September 1895.

2. I am at the same time to state that memorials from the Associations noted on the margin have also been received, and to request that these Associations may be similarly informed.

REGULATIONS FOR 1896 OF THE FOREST SERVICE BRANCH IN  
COOPER'S HILL COLLEGE.

No. 4778For.

THE following is published for general information.

C. E. BUCKLAND,  
*Secy. to the Govt. of Bengal.*

REVENUE DEPT.,—For.,  
The 4th November 1895.

Circular No.  $\frac{18}{290-2}$  F.

*Extract from the Proceedings of the Government of India, in the Department of  
Revenue and Agriculture (Forests), dated Simla, the 18th October 1895.*

Read the following despatch from Her Majesty's Secretary of State, forwarding copies  
of the Regulations for 1896 of the Forest Service Branch in Cooper's Hill College :—

No. 98 (Revenue), dated London, the 5th September 1895.

From—The Right Hon'ble Lord George Hamilton, Her Majesty's Secretary of  
State for India,

To—The Right Honourable the Governor-General of India in Council.

I FORWARD herewith, for the information of Your Excellency's Government, ten copies of  
the Regulations for admission to the Forest Service Branch at Cooper's Hill College for the  
year 1896.

REGULATIONS FOR THE FOREST SERVICE BRANCH OF THE ROYAL INDIAN  
ENGINEERING COLLEGE, COOPER'S HILL, FOR 1896.

[*Post Town, Staines. Railway Station, Egham. Telegraph Station, Englefield Green.*]

STAFF OF THE COLLEGE.\*

President, General Sir Alexander Taylor, G.C.B., R.E.  
Secretary, Lieutenant-Colonel W. J. Boyes.  
Bursar, J. P. Pasco, Esq., R.N., retired.  
Chaplain, Rev. C. Croslegh, D.D.

*Engineering Branch.*

Assistant Professor of Engineering, A. H. Heath, Esq., A.M.I.C.E.  
Professor of Surveying, Major-General E. H. Courtney, R.E.  
Instructor in Geometrical Drawing, Arthur Hicks, Esq.  
Lecturer in Accounts, J. C. Hurst, Esq.  
Instructor in Freehand Drawing, Russell Dowson, Esq.

*Mathematical Branch.*

Professor of Applied Mathematics, G. M. Minchin, Esq., M.A., F.R.S.  
Professor of Pure Mathematics, A. Lodge, Esq., M.A., Fereday Fellow of St. John's  
College, Oxon. .

*Natural Science Branch.*

Professor of Chemistry, Herbert McLeod, Esq., F.R.S.  
Professor of Physics, W. N. Stocker, Esq., M.A., Fellow of Brasenose College, Oxon.  
Lecturer in Geology and Mineralogy, Professor H. G. Seeley, F.R.S.

*Forestry Branch.*

Principal Professor of Forestry, W. Schlich, C.I.E., PH.D., late Inspector-General of  
Forests to the Government of India.  
Assistant Professor of Forestry, W. R. Fisher, Esq., B.A., late Conservator of Forests,  
Northern India.  
Professor of Botany, H. Marshall Ward, Esq., M.A., B.D., F.R.S., F.L.S., Fellow of Christ'  
College, Cambridge.

\* The staff of the College is only given in so far as it concerns the Forest Branch.



Lecturer on Entomology, W. F. H. Blandford, Esq., M.A., Fellow of Christ's College, Cambridge.

Lecturer on Chemistry of Soils and Vegetation, A. H. Church, Esq., M.A., F.R.S.

Instructor in German, T. H. Dittel, Esq.

Lecturer on Forest Law, B. H. Baden-Powell, Esq., C.I.E., late of the Indian Civil Service.

Director of Practical Study in Forestry on the Continent, Sir Dietrich Brandis, K.C.I.E., F.R.S., late Inspector-General of Forests to the Government of India.\*

[The arrangements hereinafter described are subject to revision under the orders of the Secretary of State for India.]

1. The Royal Indian Engineering College is primarily maintained, under the orders of the Secretary of State for India in Council, for the education of candidates for the service of Government in the India Public Works, Telegraph, and Forest Departments; but it is open, to the extent of the accommodation available, to all persons desirous of following the course of study pursued in it.

*India Forest Department Appointments.*

2. The examination, which is conducted by the Civil Service Commissioners, usually takes place towards the end of June; and candidates may undergo the written part of their examination in London, Edinburgh, or Dublin, or at any of the provincial centres at which the simultaneous examination of candidates for admission to the Royal Military College, Sandhurst, is to be held. A list of the probable centres may be obtained from the Civil Service Commissioners at any time after March 1896. The oral and practical parts of the examination will be held in London only.

A fee of £2 is required from candidates examined in London, but when the written examination is conducted elsewhere than in London the fee is £3. Candidates examined at a college or school will probably be required to pay a local fee in addition to the fee of £3 (in order to defray the expenses of superintendence), as to which they should obtain early information from the college or school authorities. The fee payable to the Civil Service Commissioners must be paid by means of stamps of the specified amount. Instructions on this point will be issued to candidates about 10 days before the examination.

3. The number of candidates to be selected annually varies according to the requirements of the Forest Service in India; the figures as regards each particular year will be advertised from time to time. In 1896 there will be six appointments offered for competition. It is possible that after 1896 recruits for the Indian Forest Service will be selected from Cooper's Hill College students at the end of their first year's course of study.

4. Candidates for the Indian Forest Department are selected under the following arrangements:—

- (a) An applicant must be a natural-born British subject, and must be above 17 and under 20 years of age on the 1st June of the year in which he competes for an appointment. He must be unmarried, and if he marries before reaching Indian, he will forfeit his appointment.
- (b) An applicant must send† to the Revenue Department of the India Office, on or before the 15th day of May of the year in which he proposes to compete:—
  - (1) His name and parentage, a certificate or other satisfactory evidence of the date of his birth, and the written consent of parent or guardian that his name should be recorded as a candidate.
  - (2) A statement of the places of education at which he may have been, accompanied by testimonials of good conduct, during the last four years.
- (c) Applicants will have to appear before a Medical Board‡ at the India Office, particular stress being laid upon good vision and hearing. A physical test will also be imposed, so as to ensure the selection of persons of active habits and powers of endurance.

\* Sir D. Brandis is not on the staff of the College.

† There is no form of application; the documents specified in paragraph 4(b), clauses (1) and (2), should be enclosed in a covering letter addressed to the Secretary, Revenue Department, India Office London.

‡ With a view to prevent parents and guardians from incurring the inconvenience and expense of preparing candidates who may be physically unfit for the Forest Service, it is suggested that, before any such preparation is begun, candidates be submitted to examination by the medical adviser of the family, or any other qualified medical practitioner, with regard to the following points:—

1. A weak constitution.
2. Defective vision.
3. Impaired hearing.
4. The existence of any congenital defect.

It is to be understood that this private examination is merely suggested to lessen the chances of disappointment, and that it is by no means intended to take the place of, or to influence in any way, the official examination.

On the subject of the standard of eyesight required for the Indian services, a pamphlet has been published, under the authority of the Secretary of State in Council, by Messrs. Churchill and Sons, 11, New Burlington Street.



- (d) The applicants who have successfully passed the medical examination and the physical test will be required to undergo an examination before the Civil Service Commissioners in the following subjects\* (Classes I to III), marks being assigned as follows:—

CLASS I.—OBLIGATORY SUBJECTS.†

	Marks.	
1. Mathematics (lower), viz., Algebra up to and including the Binomial Theorem; the theory and the use of logarithms; Euclid, Books I to IV and VI; Plane Trigonometry up to and including the solution of Triangles and Mensuration ... ..	2,500	In each of these subjects a candidate must obtain not less than one-third of full marks in order to qualify.
2. English composition ... ..	1,000	
3. German (400 for colloquial) ... ..	2,000	

CLASS II.—OPTIONAL SUBJECTS.

4. Mathematics (higher), including Analytical Geometry, Conic Sections, Statics, and Dynamics ... ..	2,000	A candidate may take any two, but not more than two, of the optional subjects.
5. French (400 for colloquial) ... ..	2,000	
6. Latin ... ..	2,000	
7. Greek ... ..	2,000	
8. English History. There will be set: one general paper; one paper limited to a fixed period, which will be from the year 1702 to the year 1788 for the examination of 1896 ... ..	2,000	Under "Optional Subjects" Nos. 9, 10, 11, and 12 the examination will be partly practical.
9. Botany, viz., the elementary parts of vegetable morphology, histology, and physiology, and the principles of a natural system of classification as illustrated by the more important British natural orders. Candidates will be required to describe plants in technical language. Questions will not be set on vegetable palæontology or on the geographical distribution of plants ... ..	2,000	
10. Chemistry, viz., the elements of Inorganic Chemistry ... ..	2,000	
11. Physics. Elementary properties of Electricity, Magnetism, Heat, Light, and Sound ... ..	2,000	
12. Physical Geography and Geology, chiefly economic; including the recognition of the more familiar minerals and rocks, and their properties and uses ... ..	2,000	

CLASS III.—ADDITIONAL SUBJECTS.

13. Freehand Drawing ... ..	500	Either or both of these subjects may be taken in addition to the obligatory and the two optional subjects.
14. Geometrical Drawing ... ..	300	

- (e) The Secretary of State will nominate as probationers such competitors as attain the highest aggregate of marks (provided they obtain the minimum in the obligatory subjects and satisfy the requisite conditions in other respects). These probationers will then enter the College, where they will be further trained for the Forest Service of India.

- (f) If the full number of competent probationers required in any year cannot be obtained from the persons so examined, the Secretary of State reserves a discretion to fill up the deficiency by selecting any other person or persons who may satisfy the authorities of the College that he or they are properly qualified to become probationers for the Forest Service.

5. The course of study for candidates for the India Forest Service extends over about three years, divided into seven terms, and a period of study in foreign forests. During seven terms the candidates will prosecute their studies mainly at the College, and during the period of foreign study, which may last for five or six months, they will visit, under suitable supervision, such continental forests as may be selected for the purpose. Excursions may also be made for purposes of instruction, both during term time and during part of the vacations.

\* Reprints of the papers set at previous examinations, together with tables of the marks assigned to the candidates, are published by the Civil Service Commissioners, and can be obtained through any bookseller. The price of each reprint is one shilling.

† Attention is invited to the appended Syllabus, giving further details regarding the extent and character of the examination.

6. Each annual session begins in September and is divided into three terms, with vacations of about four weeks at Christmas, two weeks at Easter, and eight weeks in the summer, except at the end of the visit to the Continent when the vacation will be shorter.

7. A charge of £61 is made for each of the seven terms spent at the College; for the period of foreign study the charge is £150 for each student; the amount must be paid terminally in advance to the Bank of England for the first seven terms, and the amount due for the period of foreign study must be paid before the period begins. Receivable orders, with full directions as to the mode of payment, will be forwarded from the India Office to the parents or guardians, shortly before the fees fall due. A student will not be allowed to come into residence or to start for his foreign study of the forests until his fee has been paid.

8. A deposit of £5 is required to be paid by each student on admission to the College as caution money to cover charges incurred by him for damage to books, instruments, &c., or any College bills outstanding on leaving the College. Any balance over and above such charges will be repaid. This deposit is to be paid with the fee for the first term, making the total payment on that occasion £65.

9. The foregoing payments cover all charges for tuition, board according to the College tariff, lodging, with washing, up to a cost of 2s. a week, and ordinary medical attendance while in residence at the College. When students are on tour and during the course of practical instruction, whether in Great Britain or on the Continent, the Secretary of State will defray the expenses of (1) board, lodging, and washing (the aggregate maximum expenditure under these heads being 10s. per diem), (2) travelling expenses, and (3) fees to local Forest officers, &c.

Students are required to provide their own class books and drawing instruments. Drawing paper, drawing boards, and surveying instruments are provided by the College.

10. The prescribed course of study comprises the following subjects:—

#### I.—Auxiliary Subjects.

1. Geometrical Drawing.
2. Freehand Drawing.
3. Surveying.
4. Forest Engineering.
5. Accounts.
6. German.
7. Mechanics.

8. Physics.
9. Chemistry.
10. Geology and Mineralogy.
11. Entomology.
12. Botany.
13. Drill and Gymnastics.

#### II.—Forestry, theoretical and practical, in all its branches.

11. Every student is required to conform to the College rules, to exhibit due diligence in his studies throughout the course, and to give evidence of satisfactory progress in such manner as may be required; failing which, or in the event of serious misconduct, he will be liable to be removed from the College, or to be sent back from the foreign study, which may entail the loss of his appointment.

12. During the course of study, the proficiency of the students will be tested by periodical examinations, and on the termination of their studies there will be a final examination. Each student may also, at the discretion of the Secretary of State for India, be required to appear before the Medical Board at the expiration of the first year of residence at the College, and should the result be unsatisfactory he cannot claim to be allowed to complete the course.

13. The subjects enumerated in paragraph 10 are grouped in certain main branches of study,\* and a fixed minimum of qualification is required in each branch and in the subjects taught during the forest tours, as well as a certain minimum for all branches taken together. Students who obtain these minima will receive the College diploma in forestry.

14. Candidates who have obtained this diploma and are found to be of sound constitution and free from physical defects which would render them unsuitable for employment in the Forest Department (the final decision on which points will rest with the Secretary of State for India), will be appointed Assistant Conservators in the Forest Department of India in the order of their standing at the end of the final examination. They will be allowed, before leaving the College, to state their preference in respect to the Provinces which they desire to be allotted; but the distribution will be made to the several Provinces according to the needs of the public service, at the discretion of the Secretary of State for India after consulting the President of the College and the Principle Professor of Forestry. The distribution will be made on the understanding that officers are at all times liable to be transferred from one Province to another at the pleasure of the Government of India.

15. Within a month of his nomination as Assistant Conservator, each nominee must sign articles of agreement describing the terms and conditions of his appointment; he must embark for India when required to do so by the Secretary of State, and will be provided

\* For details see Royal Indian Engineering College Calendar.

with a free passage. Failure to embark at the stated time will, in the absence of satisfactory explanation, lead to forfeiture of appointment.

16. The pay of an Assistant Conservator of Forests will begin from the date of reporting arrival in India. Probationers who acquit themselves creditably during their course at Cooper's Hill College will begin on a salary of Rs. 350 a month. It will, however, rest with the President of the College, in consultation with the Principal Professor of Forestry, to decide whether any of the probationers, though they have obtained the College diploma in Forestry, have failed to deserve that rate of initial salary. Such probationers, if any, will begin on a salary of Rs. 250 a month; and this difference of salary will continue until the first departmental examination is passed in India.

17. Promotion, leave, and pension will be regulated by the rules of the Service for the time being. The more favourable pension rules have recently been extended to Forest officers appointed from England, who are thus placed on an equality with Public Works officers appointed from Cooper's Hill College. Any Forest officer who has rendered not less than three years' approved service as head of his department, has also been made eligible for an extra pension of Rs. 1,000 per annum. A copy of the Regulations relative to this matter can be seen on application either at the Library or the Record Department of the India Office; the principal rules, however, are contained in the Abstract of the Civil Service Regulations, as given in the "India Office List" or the "India List," published respectively by Messrs. Harrison and Sons, 59, Pall Mall, and Messrs. W. H. Allen & Co., 13, Waterloo Place, S. W., either of which can be procured through any bookseller.

18. Every candidate before proceeding to India will be required to furnish to the President of the College satisfactory evidence of his competency in riding.

#### GENERAL RULES.

19. Chemical, physical, and botanical laboratories, a forestry museum, a forest nursery, a library, and gymnasium are attached to the College. Means are also provided for the practice of photography. Students making use of the laboratories are supplied with the needful apparatus.

20. The responsibility for the discipline and management of the College and for the superintendence of the studies is vested in the President, under the control of the Secretary of State for India.

21. The students are distributed in divisions, under personal charge of one of the Professors or Instructors selected by the President; such tutor being responsible for exercising the proper degree of personal supervision over each student in his division, and for conducting necessary correspondence with the student's parents or guardians.

22. Each student residing in the College is provided with a separate room, and with fuel and light, also with the necessary attendance. Furniture and bedding are supplied by the College, but students are required to provide their own towels and bed linen. Meals are taken in hall. Wine and beer are not included in the ordinary fare, but can be obtained from the College cellar at fixed prices.

23. A chapel is attached to the College, which the students residing in the College are expected to attend, unless specially exempted.

24. Every student will be required to go through a course of gymnastics and also of military exercises, including the use of the rifle.

25. Students are required to wear academical dress, under such regulations as may be prescribed from time to time.

*Students not nominated for the Indian Forest Service, but desirous of obtaining a Diploma in Forestry from Cooper's Hill College.*

26. Students not nominated for the Indian Forest Service may be received into the College, as far as the available accommodation permits. Such students may pass through the course of instruction prescribed for the nominees of the Indian Forest Service, as detailed above, or they may be permitted to participate in the instruction given in certain subjects only. On attaining the prescribed minima of marks in the several branches of study and in totals as laid down above, they will receive, as the case may require, either the College Diploma in Forestry, or special certificates showing in what subjects they have followed the instruction and with what result.

27. Candidates who desire to be admitted under paragraph 26 may submit the necessary application at any time, but not later than the 15th day of June of the year named for admission, except with the special permission of the President. The application must be made on the prescribed forms, which can be obtained from the Secretary of the College.

28. Candidates whose applications are found satisfactory as to character and in other respects will be required to undergo an examination, to be held at the College, about the last week in June of the year for admission. The object of the examination will be to ascertain whether the candidate is qualified to follow the course of instruction with advantage (or ascertain parts of it, as the case may be). Candidates who do not come up to the required standard will not be admitted to the College.

The President may dispense with the whole or any portion of this examination in the case of a candidate who produces an University diploma, or other similar certificate granted by a recognized examining body.

29. Candidates admitted to the College under paragraph 26, who propose to pass through the full prescribed course of study, will be required to pay the same fees in every respect as those paid by the nominees for the India Forest Service. Candidate who do not become resident, and are admitted only to certain subjects of study, will be required to pay the fees which may be fixed in each special case in consideration of the extent of their studies. The candidates of both classes will be required to abide by the general rules of the College.

INDIA OFFICE,  
August 1895.

## FOREST EXAMINATION.

### SYLLABUS.

#### CLASS I.

*Mathematics.*—The extent of the Examination will be as follows:—

- (a) Algebra, up to and including the binominal theorem, the theory and use of logarithms;
- (b) Euclid, Books I to IV and IV;
- (c) Plane Trigonometry up to and including solution of triangles and mensuration.

*English Composition*—The standard of positive merit will be looked for in logical arrangement of thought, and in accuracy and propriety of expression, but large deductions of marks will be made for faults of writing and spelling.

Candidates are also warned that, for similar faults in the use of the English language similar deductions will be made from the marks obtained in the German papers in Class I.

*German.*—There will be translations of unseen passages from German into English, and from English into German; the passages for translation will be taken, mainly, from standard authors, and a few simple questions may be asked on the passages set, as to the structure and character of the language, and allusions of obvious and general interest. The *vis à vis* Examination will include Dictation.

#### CLASS II.

Any two Subjects may be made up.

*Higher Mathematics:*—

•• In all the following subjects great importance will be attached to accuracy in numerical results.

Further questions and problems on the subjects of the Examination in Mathematics, Class I.

And in addition:—

*Statics:* The equilibrium of forces acting in one plane and of parallel forces, the centre of gravity, the mechanical powers, and friction. (The graphical or geometrical method of treating such problems should be studied as well as the analytical. No application of the differential calculus to Statics will be required.)

*Dynamics:* Uniform, uniformly accelerated, and uniform circular motion, falling bodies and projectiles *in vacuo*, collisions and work. (Analytical methods of solution, but not the use of the differential calculus, will be involved.)

*Analytical Geometry:* Problems on straight line and circle.

*Conic Sections:* Elementary properties, with easy problems both on the analytical and geometrical methods.

*French.*—The passages for translation will be taken mainly from standard authors, and in other respects the Examination will proceed on the same lines as in German.

*Latin.*—Passages selected from the authors usually read in schools will be set for translation into English. Passages from English authors will be given for translation into Latin prose and verse; but Candidates will be allowed, in the place of verse composition, to answer questions of a simple character, which will test whether they possess a fundamental knowledge of the grammar of the language, and such an elementary acquaintance with Roman History as is required for the intelligent study of the books they have read.

*Greek.*—Passages will be set for translation into English from the authors usually read in schools, and in other respects the Examination will proceed on the same line as in Latin.

*English History.*—The General Paper in this subject will test whether the candidates are accurately acquainted with the facts of English History, and also possess an intelligent knowledge of the meaning of the facts. The paper on the fixed period will, of course, require from the candidates more minute knowledge than the General Paper.

*Botany, Chemistry, Physics, Physical Geography, and Geology.*—The standard of Examination in these subjects will be such as may be reasonably expected from the education given at schools possessing appliances for practical instruction, such as a laboratory, &c. A considerable portion of the marks will be allotted for the proficiency shown in the practical part of the Examination.

Chemistry will be limited to elements of inorganic chemistry.

Physics will include elementary properties of electricity, magnetism, heat, light, and sound

Geology, chiefly economic, including the recognition of the more familiar minerals and rocks, and their properties and uses.

### CLASS III.

Both subjects may be taken up.

*Drawing, Freehand.*

*Drawing, Geometrical.*

### GENERAL.

*Handwriting.*—In estimating the papers of candidates, a limited number of marks, namely 100 out of the maximum allotted to each subject, is assigned for handwriting.

**ORDER**—Ordered that a copy be forwarded, for information, to the Governments of Madras and Bombay, the Local Governments and Administrations noted in the margin, the Inspector-General of Forests, and the Comptroller and Auditor-General.

Bengal.	Assam.
North-Western Prov.	Coorg.
inces and Oudh.	Ajmere.
Punjab.	Andamans.
Central Provinces.	Baluchistan.
Burma.	Hyderabad.

in the Supplement to the *Gazette of India*.

Ordered, also, that these papers be published

[True Extract.]

F. G. SLY,

*Under-Secretary to the Govt. of India.*



## WEATHER AND CROP REPORT.

For the week ending the 4th November, 1895.

**Burdwan.**—Rainfall at Burdwan 2·51. Weather cooler. Rain fell generally on the 27th and 28th October. Prospects of winter rice slightly better. Condition of cattle good. Fodder sufficient. Common rice sells at an average price of 15½ seers per rupee.

**Midnapore.**—Rainfall at Sadar 1·01, Contai ·87, Tamluk ·46, and Ghatal 1·14. Weather cooler. The recent rain has ameliorated the prospects of the standing crops and added moisture for the *rabi*. Water and fodder plentiful. Prices of common rice:—

					Srs.	
Sadar	...	...	...	...	16	} per rupee.
Contai	...	...	...	...	21	
Tamluk	...	...	...	...	16 to 19	
Ghatal	...	...	...	...	14 to 15	

**24-Parganas.**—Rainfall at Sadar ·38. Weather seasonable. Prospects of *aman* crops fair: those on high lands in the Basirhat subdivision reported to be drying up for want of sufficient rain. Rainfall of the 27th October has done some good to the *aman* crops in the Barasat subdivision. Sugarcane doing well. Sowing of *rabi* crops continues. Fodder and water sufficient. No cattle-disease. Rice sells at—

					Srs.	
Sadar	...	...	...	...	12 to 14	} per rupee.
Barasat	...	...	...	...	15	
Basirhat	...	...	...	...	16	
Diamond Harbour	...	...	...	...	17	

**Murshidabad.**—Rainfall 1·43. Weather seasonable. The recent rain has done much good to *aman* rice all over the district and has saved a good deal. It has also enabled sowing of winter crops to go on everywhere. Sugarcane and mulberry doing well. Fodder for cattle sufficient. Common rice sells at 16 seers per rupee.

**Khulna.**—Rainfall at Khulna ·10, Bagerhat ·05, Satkhira ·23. Weather seasonable. Land is being prepared for *rabi* crops. *Aman* doing well. The rain has done good to the *aman* crop. Fodder and water sufficient. Prices of common rice:—

					Srs.	
Sadar	...	...	...	...	17 to 21	} per rupee.
Bagerhat	...	...	...	...	18	
Satkhira	...	...	...	...	16	

**Dinajpur.**—Average rainfall ·11. Weather seasonable. Standing crops good. Price of common rice 15 to 16 seers a rupee. No cattle-disease, nor any complaint for fodder or drinking water.

**Rangpur.**—Average rainfall ·03. Weather seasonable: tolerably cool at night. Prospects of standing *aman* are good. Washing of jute and cultivation of land for winter crops going on. More rain is wanted. Price of common rice 12 to 14 seers a rupee. Fodder sufficient.

**Patna.**—Rainfall nil. Weather hot in day time, but cool at night. Prospects of *aman* paddy good at Sadar, but indifferent at Sirajganj, where more rain is wanted. *Rabi* crops are being sown. Common rice sells at Sadar 16 seers and Sirajganj 14 seers per rupee. Fodder sufficient.

**Dacca.**—Rainfall ·77. Weather seasonable. Recent rain has done good to the standing crops. Price of common rice 17 seers per rupee. No cattle-disease.

**Chittagong.**—Rainfall nil. Early *aman* is being harvested. Paddy on high lands suffering for want of rain. Water and fodder sufficient. Rice selling at 17 seers per rupee.

**Patna.**—Rainfall nil. Prospects of paddy fair. The absence of rain in October is, however, expected to affect the outturn. *Rabi* sowings in progress; those already sown are germinating. Fodder and water sufficient. Condition of cattle good. Common rice selling at 18½ seers per rupee.

**Gaya.**—Rainfall nil. Both winter rice and *rabi* suffering for want of rain. Pressing of sugarcane in progress. Price of common rice at Sadar 14 seers against an average of 16½ seers per rupee. Water and fodder sufficient.

**Champaran.**—No rain. *Rabi* being sown. *Aghani* suffering for want of rain. Fodder and water for cattle sufficient.

**Darbhanga.**—No rain. Upland paddy withering for want of rain. *Rabi* sowings in progress, but rain is much wanted. Fodder for cattle sufficient. Prices almost stationary.

**Bhagalpur.**—There has been slight rain (0·13) at Banka ; no rain in other parts of the district. Weather seasonable. Prospects of both paddy and *rabi* unfavourable. Yield of paddy estimated under 12 annas. Sugarcane doing well. Common rice continues to be sold at 17 seers 10 chitaks per rupee. Fodder and water sufficient. Cattle-disease reported from a few scattered villages.

**Purnea.**—No rain. *Rabi* sowings going on. Paddy on high lands wants rain throughout the district. No cattle-disease. Common rice sells at 20 seers per rupee.

**Cuttack.**—Rainfall 2·20. Weather cloudy. *Sarad* in ears and attaining maturity. Condition of cattle good. Fodder sufficient. Common rice sells at—

				Srs. c.	
Cuttack	...	...	...	23 5	} per rupee.
Jajpur	...	...	...	28 12	
Kendrapara	...	...	...	31 8	
Banki	...	...	...	31 8	

**Hazaribagh.**—Rainfall at Giridi 1·80. The last rainfall has not been general, and prospects of rice crops are not as good as expected. Outturn will probably only average 10 annas. *Rabi* prospects good. Fodder and grazing plentiful. Common rice selling at 12 to 14 seers per rupee.

**General Summary.**—The rain, which fell generally over Lower Bengal, Orissa, and part of Chota Nagpur towards the end of October, is reported to have done much good to the *aman* crop and facilitated the sowing of the *rabi* crops. In Bihar the absence of rain in October has been harmful to the winter rice and has also affected the prospects of the *rabi* crops. In parts of North and East Bengal too the rice is said to have suffered owing to the early cessation of the rains. The price of common rice continues still steady. Cattle are generally in good condition.

By order of the Lieutenant-Governor of Bengal,

REVENUE DEPARTMENT,  
The 5th November, 1895.

C. E. BUCKLAND,  
Secretary to the Government of Bengal.

## PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN														
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLU. (Sorghum Vulgare.)		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.

## BENGAL.

		S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.			
BURDWAN DIVISION.	1	Burdwan	13	0	13	8	16	0	...	...	...	12	12	12	12	12	0	15	12	15	12	16	14	...	...	...	...	...	...			
	2	Birbhum	13	0	15	12	12	0	...	...	...	13	8	15	0	12	0	17	4	18	0	15	12	...	...	...	...	...	...			
	3	Bankura	13	0	15	8	14	8	18	2	...	...	12	8	12	8	15	0	17	8	18	0	20	0	...	...	...	...	...			
	4	Midnapore	18	0	16	0	14	8	16	0	...	...	15	0	14	8	12	8	16	0	19	0	15	0	...	...	...	...	...			
	5	Hooghly	...	...	...	...	13	0	...	...	...	8	0	8	0	8	0	12	14	12	5	11	8	...	...	...	...	...	...			
	6	Howrah	...	...	...	...	...	...	...	...	...	11	8	11	0	9	8	15	5	13	8	11	12	...	...	...	...	...	...			
PRESDENCY DIVISION.	7	24-Parganas	...	...	...	...	...	...	...	...	7	8	8	0	7	4	13	8	13	8	12	18	...	...	...	...	...	...	...			
	8	Calcutta	12	1	12	4	13	9	16	6	16	0	20	10	8	0	7	12	7	12	12	4	11	6	10	5	17	12	17	4	20	0
	9	Nadia	16	0	15	8	16	0	...	24	0	17	0	7	4	7	4	6	14	14	13	14	13	12	7	...	...	...	...	...	...	
	10	Murshidabad	16	0	16	0	15	0	...	...	...	10	8	11	0	10	0	15	0	16	0	14	0	...	...	...	...	...	...	...	...	
	11	Jessore	13	0	13	0	11	0	13	0	16	0	...	11	8	12	0	9	8	13	7	16	0	14	4	...	...	...	...	...	...	
	12	Khulna	...	...	...	...	...	...	...	...	...	16	0	16	0	11	8	18	0	18	0	14	7	...	...	...	...	...	...	...	...	
RAJSHAH DIVISION.	13	Rajshahi	16	8	17	4	15	0	26	4	26	4	24	0	12	0	10	8	15	0	15	15	13	8	...	...	...	...	...	...	...	
	14	Dinajpur	15	0	15	0	18	0	16	0	16	0	14	0	11	13	11	13	9	9	16	10	16	10	12	0	...	...	...	...	...	...
	15	Jalpaiguri	12	8	13	0	12	0	...	...	...	10	0	10	0	8	0	16	0	16	0	14	0	...	...	...	...	...	...	...	...	...
	16	Darjeeling	8	0	8	0	8	0	9	0	9	0	9	0	5	8	5	8	5	8	14	0	14	0	11	0	...	...	...	...	...	...
	17	Rangpur	...	...	...	...	...	...	...	...	...	11	4	9	0	7	0	15	0	16	0	10	0	...	...	...	...	...	...	...	...	...
	18	Bogra	13	8	17	4	15	0	...	...	...	12	0	12	0	10	8	15	12	18	0	15	0	...	...	...	...	...	...	...	...	...
DACCA DIVISION.	19	Pabna	18	0	18	12	15	0	22	8	21	0	21	0	6	6	6	6	6	6	18	0	18	0	16	4	...	...	...	...	...	...
	20	Dacca	13	0	13	0	13	12	...	...	...	12	12	12	12	9	10	17	0	17	0	12	12	...	...	...	...	...	...	...	...	...
	21	Mymensingh	9	8	9	8	9	8	...	...	...	12	0	12	0	10	0	14	0	14	0	11	0	...	...	...	...	...	...	...	...	...
	22	Faridpur	18	0	18	0	15	0	...	...	16	0	8	0	7	10	7	8	16	0	18	0	12	0	...	...	...	...	...	...	...	...
	23	Backergunge	...	...	...	...	...	...	...	...	...	13	5	14	0	9	15	16	0	16	0	10	8	...	...	...	...	...	...	...	...	...

A In the subdivisions the retail prices of salt per rupee are:—Kalna 10 seers, Katwa 11 seers and Raniganj 10½ seers.

B At Rampur Hat the retail price of salt is 11½ seers per rupee.

C At Vishnupur the retail price of salt is 10 seers per rupee.

D In the subdivisions the retail prices of salt per rupee are:—Contal 10 seers, Tamluk 11 seers and Ghatal 10 seers 7 chitaks.

E In the subdivisions the retail prices of salt per rupee are:—Serampore 11 seers 7 chitaks and Jahanabad 10 seers 10 chitaks.

F At Ulubaria the retail price of salt is 10 seers 10 chitaks per rupee.

G In the marts in the interior of the district the retail prices of salt per rupee are:—Chetla 11 seers 7 chitaks, Barnasat 10 seers 10 chitaks, Magrabat 10 seers 9 chitaks, and Baduria 11 seers 8 chitaks.

H In the subdivisions the retail prices of salt per rupee are:—Kushtia (Bahadurkhal) 10½ seers, Chuadanga 10 seers, Meherpur 12 seers and Ranaghat 10 seers.

I In the Kandi and Jangpur subdivisions the retail price of salt is 11 seers per rupee.

J In the subdivisions the retail prices of salt per rupee are:—Jhenida 10 seers, Magura 9 seers 9 chitaks, Narail 9½ seers and Bangson 10 seers 10 chitaks.

8KERS OF 80 TOLANS.

BAJRA OR CUMBU. <i>Pennisetum typhoidum.</i>			MARUA OR RAGI. <i>Eleusine Corocana.</i>		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.

[illegible]

KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Seta riza sativa.</i> )			GRAM, CHANA, CHEOLA, KADALAY, OR SURAGA. ( <i>Cicer cristianum.</i> )		
Present return.	Next preceding re- turn.	re- turn. Corresponding turn of last year.	Present return.	Next preceding re- turn.	re- turn. Corresponding turn of last year.

S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
...	...	...	...	15	0	17	0	17	12
...	...	...	...	16	0	18	0	12	12
...	...	...	...	15	0	15	0	16	0
...	...	...	...	15	0	16	0	16	0
...	...	...	...	16	0	16	0	16	0
...	...	...	...	...	...	...	...	...	...

...	...	...	...	14	0	16	0	16	0
10	10	10	5	10	10	15	9	15	3
...	...	...	...	16	8	19	4	17	0
...	...	...	...	20	0	20	0	16	0
...	...	...	...	16	0	16	0	16	0
...	...	...	...	11	8	11	8	11	8

...	...	...	...	19	8	19	8	15	12
...	...	...	...	17	0	17	12	13	0
...	...	...	...	16	0	16	0	14	0
...	...	...	...	12	8	12	8	11	0
...	...	...	...	15	0	16	0	15	0
...	...	...	...	16	8	16	8	13	0
...	...	...	...	15	0	15	0	13	0

...	...	...	...	14	0	14	0	14	0
...	...	...	...	12	8	12	8	12	0
...	...	...	...	16	0	14	0	10	0
...	...	...	...	18	14	14	4	13	0



## Head-quarters Station Bazars of the Districts of Bengal on the 31st October 1895.

															WHOLESALE PRICES PER MAUND OF 40 SEERS.						DISTRICTS.	Number.									
INDIAN-CORN OR MAIZE. (Zea Mays.)			ARRAR OR THUR, CADJAN PRA. (Cajanus Indicus.)			FIREWOOD.			SALT.			SALT.																			
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.														
S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Rs.	A.	P.														
...	...	...	16	0	16	4	13	4	90	0	90	0	100	0	11	0	11	4	3	4	0	3	5	0	3	9	0	Burdwan.	1		
...	...	...	10	8	12	0	12	0	162	0	160	0	120	0	10	8	10	8	3	10	6	3	10	6	3	10	6	Birbhum.	2		
...	...	...	11	5	11	0	13	5	320	0	320	0	320	0	10	1	11	2	3	12	0	3	10	0	3	10	0	Bankura.	3		
...	...	...	15	0	16	8	17	0	320	0	320	0	200	0	11	8	10	8	3	6	0	3	8	0	3	10	0	Midnapore.	4		
...	...	...	14	0	11	8	10	0	160	0	160	0	160	0	10	0	...	...	3	12	0	3	12	0	3	12	0	Hooghly.	5		
...	...	...	11	0	11	0	11	8	105	0	105	0	105	0	11	0	11	0	3	6	0	3	6	0	3	10	0	Howrah.	6		
...	...	...	11	10	12	4	13	5	160	0	90	0	98	8	11	7	11	0	3	4	0	3	8	0	3	3	0	24-Parganas.	7		
16	6	16	6	18	13	14	8	14	3	18	4	91	6	91	6	85	0	11	13	3	7	0	3	8	0	3	6	0	Calcutta.	8	
...	...	...	17	8	17	8	17	8	128	0	128	0	128	0	10	8	10	8	3	8	0	3	8	0	3	10	0	Nadia.	9		
...	...	...	18	0	18	0	16	0	190	0	190	0	170	0	11	0	11	0	3	6	0	3	6	0	3	6	0	Murshidabad.	10		
...	...	...	16	0	16	0	...	...	...	...	...	120	0	9	2	9	2	10	0	3	10	0	3	10	0	4	0	0	Jessore.	11	
...	...	...	11	0	11	0	11	0	160	0	160	0	160	0	10	12	10	12	3	8	0	3	8	0	4	0	0	Khulna.	12		
...	...	...	20	6	20	2	16	1	240	0	240	0	240	0	9	9	9	9	3	10	8	3	10	8	3	13	4	Rajshahi.	13		
...	...	...	...	...	...	...	...	...	120	0	120	0	120	0	10	0	10	0	3	10	0	3	10	0	3	10	0	Dinajpur.	14		
...	...	...	10	0	11	0	12	0	160	0	160	0	180	0	10	0	10	0	3	10	0	3	10	0	3	10	0	Jalpaiguri.	15		
25	0	25	0	22	0	7	8	7	8	0	126	0	120	0	8	0	8	0	4	8	0	4	8	0	4	12	0	Darjeeling.	16		
...	...	...	9	0	10	0	8	0	80	0	60	0	60	0	9	0	9	0	4	4	0	4	0	0	4	0	0	Rangpur.	17		
...	...	...	...	...	...	...	...	...	90	0	90	0	90	0	9	12	9	12	3	12	0	3	13	4	3	15	...	Bagra.	18		
...	...	...	18	0	18	0	18	0	160	0	160	0	200	0	9	12	9	12	3	7	6	3	9	0	3	9	9	Patna.	19		
...	...	...	15	11	14	12	15	0	115	0	115	0	140	0	10	10	10	10	9	0	3	10	0	3	9	0	4	0	0	Dacca.	20
...	...	...	13	0	13	0	13	0	120	0	120	0	100	0	8	0	8	0	4	0	0	4	0	0	4	0	0	0	Mymensingh.	21	
...	...	...	13	0	13	0	...	...	160	0	160	0	120	0	9	10	10	10	4	6	0	3	12	0	3	14	0	Faridpur.	22		
...	...	...	...	...	...	...	...	...	70	0	70	0	80	0	10	8	10	8	3	8	0	3	10	0	3	12	0	Backergunge.	23	Dacca Division.	

- K In the subdivisions the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 10½ seers.  
 L In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugon 9 seers 10 chitaks.  
 M In the Alipur Duar the retail price of salt is 8 seers per rupee.  
 N At Siliguri the retail price of salt is 9 seers per rupee.  
 O In the subdivisions the retail prices of salt per rupee are :—Gaibanda 8 seers, Kurigram 8 seers and Nilphamari 9 seers.  
 P At Sirajganj the retail price of salt is 11½ seers per rupee.  
 Q In the marts in the interior of the district the retail prices of salt per rupee are :—Madanganj 11 seers 6 chitaks, Manikganj 9 seers, Mirkadam 11 seers 6 chitaks and Munshirhat 11 seers 6 chitaks.  
 R In the subdivisions the retail prices of salt per rupee are :—Kishorganj 9 seers, Jamalpur 10 seers, Karghari 10 seers, and Netrokona 10 seers 9 chitaks.  
 S In the subdivisions the retail prices of salt per rupee are :—Madaripur 11½ seers and Goalundo 11 seers.  
 T In the subdivisions the retail prices of salt per rupee are :—Pirojpur 8 seers, Patuakhali 9 seers, and Bhola not reported.



BEERS OF 80 TOLAHS.

BAJRA OR CUMBU. ( <i>Pennisetum typhoides</i> .)			MAHUA OR RAGI. ( <i>Blechnum Coccinea</i> .)		
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.

S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...

...	...	...	30	0	30	0	24	0	
...	...	...	24	0	27	0	24	8	
...	...	...	...	...	...	...	...	...	
...	...	...	25	0	30	0	21	0	
...	...	...	38	8	34	0	25	0	
...	...	...	...	...	...	...	...	...	
...	...	...	28	7	32	12	28	0	

...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...

...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...

...	...	...	24	0	27	0	21	0	
...	...	...	30	0	30	0	35	0	
...	...	...	20	4	27	0	...	...	
...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	

KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)	GRAM, GRANA, OHOLA, KADALAY OR SURAGA. ( <i>Oleria aristata</i> .)
--	---

Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.
-----------------	-----------------------------	---	-----------------	-----------------------------	---

S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
...	...	...	...	13	0	13	5	12	4
...	...	...	...	12	0	12	0	11	0
...	...	...	...	12	3	12	4	11	8

20	0	30	0	20	0	21	0	21	0	22	0
16	4	16	4	12	4	17	4	19	0	19	0
...	...	...	...	{		18	0	{		19	0
...	...	...	...			19	0			19	0
16	0	16	0	12	0	19	0	19	8	19	8
...	...	...	...	...	...	20	4	19	8	17	4
...	...	...	...	...	...	16	12	17	0	18	0
...	...	...	...	...	...	18	9	17	8	17	8

10	0	14	0	...	18	0	20	0	19	
...	...	...	...	...	18	15	20	8	17	
...	...	...	...	...	...	16	0	14	0	
13	0	16	0	13	0	15	0	18	0	14
...	...	...	...	...	...	16	0	15	0	14

...	...	...	...	...	15	12	15	12	14	0
...	...	...	...	...	14	0	14	0	13	0
...	...	...	...	...	16	0	14	0	13	0
...	...	...	...	...	14	7	13	2	12	0

...	...	...	15	0	16	0	15	0
...	...	...	{	12	0	{	13	0
...	...	...		13	0		13	0
...	...	...	14	1	15	12	13	0
...	...	...	{	15	0	{	16	0
...	...	...		16	0		16	0
...	...	...	12	0	12	0	12	0





*PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt*

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 5 0	3 4 0	2 15 0	2 8 0	2 8 0	1 15 0	5 0 0	5 2 0	5 2 0	3 5 0	3 8 0	3 14 0
2	Sirajganj ...	2 3 0	2 4 0	3 0 0	...	...	...	3 4 0	3 0 0	5 6 0	2 12 0	2 10 0	3 4 0
3	Dacca ...	2 14 0	2 14 0	2 14 0	...	...	...	3 1 0	3 1 0	4 4 0	2 3 0	2 4 0	3 8 0
4	Narayanganj ...	...	...	...	...	...	...	2 14 0	3 0 0	3 14 0	2 2 0	2 0 0	3 2 0
5	Chittagong ...	3 12 0	3 12 0	3 12 0	...	...	...	3 4 0	3 4 0	3 2 0	2 8 0	2 10 0	2 10 0
6	Patna ...	Red wheat.	2 1 6	2 3 0	1 11 0	1 11 0	1 12 0	3 4 0	3 4 0	3 14 0	2 1 6	1 14 6	2 7 0
		White wheat.	2 10 0	2 7 0									
7	Cuttack ...	3 6 0	3 6 0	2 12 0	...	...	...	3 0 0	3 0 0	3 10 0	1 11 0	1 12 0	2 7 0
8	Balasore ...	2 8 0	2 10 0	2 8 0	4 0 0	4 0 0	4 12 0	2 8 0	2 8 0	3 8 0	1 9 0	1 8 0	2 6 0
	Puri ...	3 5 0	3 5 0	3 5 0	...	...	...	2 3 0	2 13 0	3 14 0	1 7 0	1 10 0	2 8 0

CALCUTTA,  
The 5th November 1895.

PRICES PER MAUND					
JOWAR OR CHOLU. ( <i>Sorghum Vulgare</i> .)			BAJRA OR CUMBU ( <i>Pennisetum typhoides</i> .)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.
2 4 0 2	5 0 2	0 0 0	2 10 0	2 12 0	2 6
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
1 5 0 1	5 0 1	12 0	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

OF 40 SHEETS

WIKWA' OR RAK.  
(Eleusine Cerealia.)

KANGNI OR KAKUN,  
ITALIAN MILLET.  
(Setaria italica.)

Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.
...	...	...	8 12	03 14	03 123
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
1 5 01	5 01	10 6	1 5 01	5 01	14 6
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

in the undermentioned Marts of Bengal on the 31st October 1895.

GRAM, CHANA, CHHOLA KADALAY OR SUNAGA. (Cicer Aristinum.)			INDIAN-CORN OR MAIZE. (Zea Mays.)			ARHAR OR THUR, CADJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 9 0	2 10 0	2 6 0	2 7 0	2 7 0	2 2 0	2 12 0	2 13 0	2 3 0	0 7 0	0 7 0	0 6 9	3 7 0	3 8 0	3 6 0	Calcutta.
2 4 0	2 6 0	3 0 0	...	...	...	...	...	...	0 6 6	0 6 0	0 6 6	3 6 0	3 6 0	3 9 0	Sirajganj.
2 10 0	2 10 0	2 12 0	...	...	...	2 2 0	2 3 0	2 4 0	0 4 9	0 4 9	0 5 0	3 10 0	3 9 0	4 0 0	Dacca.
2 8 0	...	2 12 0	...	...	...	2 4 0	...	3 8 0	0 6 0	0 6 0	0 5 0	3 8 0	3 8 0	3 6 0	Narayanganj.
3 0 0	3 0 0	3 4 0	...	...	...	...	...	...	0 8 0	0 8 0	0 6 0	3 10 0	3 10 0	3 10 0	Chittagong.
1 14 0	1 14 0	1 12 0	1 8 6	1 5 0	1 10 0	1 15 0	1 14 0	1 14 6	0 5 0	0 5 0	0 5 0	3 8 0	3 8 0	3 7 0	Patna.
Biri or kalai. 2 10 0	2 10 0	2 12 0	...	...	...	2 2 0	2 2 0	2 2 0	0 8 0	0 8 0	0 8 0	3 7 0	3 7 0	3 9 0	Cuttack.
Chhola. 2 12 0	2 13 0	2 14 0	...	...	...	3 12 0	4 0 0	3 6 6	...	...	...	3 6 0	3 7 0	3 8 0	Balasore.
Biri or kalai. 2 8 0	2 10 0	...	...	...	...	2 10 0	2 10 0	2 14 0	0 8 0	0 8 0	0 8 0	3 4 0	3 4 0	3 4 0	Puri.

C. E. BUCKLAND,  
Secretary to the Govt. of Bengal.













**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, FOR THE WEEK ENDING, 8 A.M., SATURDAY,  
THE 2ND OF NOVEMBER 1895.**

At the end of the previous week a cyclonic storm of considerable intensity passed across the south-west of the Bay, and died away very soon after it crossed the coast between Nellore and Masulipatan. It caused a current of moist air to flow northwards over the west of the Bay and into Lower Bengal and Chota Nagpur. General rainy weather was the consequence in these parts for the first two days of the present week, falls of more than 2 inches being not unfrequent in South-West Bengal, Orissa and Chota Nagpur. The rainfall was followed by a large fall in day temperatures and also to a smaller extent at night. As the large defect which then developed remained till almost the end of the week, the means for the whole week are much below the normal, the difference for the large divisions varying from 1.6° in Orissa to 4.2° in East Bengal.

The continuance of the cloudy rainy weather in the north of the Bay, Orissa and Lower Bengal for quite a number of days after all trace of the disturbance from the south-west of the Bay had disappeared may be accounted for by a shallow depression which passed across the north of the Bay from the Burmah coast and into Bengal. While on the 27th pressure was rising slowly to moderately on the west coast and in Bengal, a slow fall prevailed in Burmah and the east of the Bay. This change extended north-westward on the 28th, and there was a brisk fall over the greater part of Lower Bengal. At that time the pressure distribution was very nearly normal, but there was a faint cyclonic circulation of winds in the central and western districts, and heavy rain fell as far north as Raniganj. Pressure continued to fall on the 29th, slowly everywhere, but rather more quickly in Burmah than in the north of the Bay. Gradients became more regular from north to south and the cloud began to clear away in Lower Bengal. Rainfall was much less general, and with the brisk rise of pressure on the 30th it entirely stopped, except in Orissa, where scattered showers fell almost till the end of the week. During the latter half of the week fine weather prevailed with rising temperature, the change being chiefly in day readings in consequence of the clear skies and brighter sunshine.

Pressure usually fell during the early part of the week and rose during the latter half. As these changes were small and readings never differed much from the normal, the means for the week are practically normal, the difference being only a few thousandths of an inch, except at some of the western stations, where there is defect of .02 to .03 inch.

Temperature has been much lower than is usual at the end of October because of the continued cloudy and rainy weather in the early part of the week. The average daily temperature in Chota Nagpur was 68°·6, in North Bengal 72° and in the other districts between 72° and 75°, except in Orissa, where it was over 77°. The greatest defect was in the eastern half of the province, especially in East Bengal, where for the whole week there is a mean defect of more than 4°. In South-West and North Bengal defect is 3°·2, in Bihar 2°·7, Chota Nagpur 2°·3 and Orissa 1°·6.

**Rainfall.**—The rather heavy rain of the early part of the week was confined to the southern districts. Very little fell in North Bengal and Bihar, which have received on an average .15 and .21 inch respectively. East Bengal received less than half an inch, but in South-West Bengal, Chota Nagpur and Orissa the falls were much above the normal of the week. In Orissa the average fall was 2.3 inches as compared with a normal fall of .95 inch; in Chota Nagpur 1.7 inches, the normal being only .23 inch; and in South-West Bengal 1.23 inches, which is more than three times the normal.

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the week ending Saturday, the 2nd of November 1895:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.		Rainy days.		Since 1st of month.	Since 1st of October 1895.				
			Of highs of each day.	Of lows of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.		
South-west Bengal	82.0	60.4	81.4	67.1	74.3	-3.3	1.23	0.95	+0.28	1.20	0.95	+1.00	Nil	0.95	-1.31	1.82
North Bengal	69.3	60.8	60.5	63.7	63.1	-3.3	0.23	0.15	+0.08	0.74	0.81	+0.03	Nil	0.01	0.35	1.34
East Bengal	88.7	65.5	81.8	65.7	73.5	-4.2	0.40	0.70	-0.30	0.85	0.72	+0.13	Nil	0.18	0.40	2.82
Bihar	69.6	65.4	64.0	67.7	72.7	-2.7	0.15	0.21	-0.06	0.36	0.10	+0.07	Nil	Nil	0.14	0.97
Orissa	87.7	66.8	81.9	73.5	77.2	-1.6	2.30	0.95	+1.35	3.10	1.07	+2.03	0.57	0.32	2.00	2.65
Chota Nagpur	81.9	67.0	77.1	69.1	68.0	-2.3	1.70	0.23	+1.47	1.33	0.43	+1.30	Nil	0.06	1.70	0.60

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 5th November 1895.

C. LITTLE,  
Offg. Meteorological Reporter to the Govt. of Bengal.





Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 27th October to 2nd November 1895.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.					HYGROMETRY.			Rainfall, past 24 hours.	
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.		Humidity at 10 A.M.
1895.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
October	27th	30.012	73.6	76.3	5.5	70.8	74.1	69.6	.657	66.8	76	0.10
"	28th	29.956	74.1	79.8	10.4	68.9	71.6	70.6	.735	70.0	96	0.23
"	29th	.935	76.2	81.6	10.8	70.8	77.6	72.6	.735	70.0	78	0.24
"	30th	.975	76.6	81.3	9.5	71.8	78.2	71.1	.668	67.3	70	Nil
"	31st	.953	76.9	85.3	16.9	68.4	80.6	69.6	.576	62.9	56	Nil
November	1st	.973	77.6	87.3	19.4	67.9	81.6	70.6	.603	64.3	56	Nil
"	2nd	.984	77.1	87.3	20.4	66.9	81.6	75.0	.752	70.7	72	Nil

The mean 10 A.M. pressure of the seven days	...	...	...	Inches.
				29.970
The mean temperature of the seven days	...	...	...	76.0
The extreme variation of temperature	...	...	...	20.4
The maximum temperature	...	...	...	82.6
The mean 10 A.M. relative humidity of the seven days	...	...	...	72%
The total fall of rain from 27th October to 2nd November 1895	...	...	...	Inch.
				0.62
The daily mean temperatures are the crude means of maximum and minimum temperatures.				

METEOROLOGICAL OFFICE, INDIA,

The 4th November 1895.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.



Vital Statistics of Towns in Bengal with a population of 20,000 and over during the month of September 1895.

Districts.	Towns.	Population under returns.	BIRTHS.		CHOLERA.		SMALL-POX.		FEVER.		DYSENTERY AND DIARRHÆA.		INJURY.		OTHER CAUSES.		TOTAL OF ALL CAUSES.		AVERAGE OF CORRESPONDING MONTH OF PREVIOUS FIVE YEARS.		REMARKS.
			Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	Number registered.	Ratio per 1,000.	
1	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Returns not entered up to date.
Burdwan	1. Burdwan	34,477	47	16.39	1	.24	...	...	55	19.06	10	3.48	3	.93	7	2.40	76	26.40	101	35.04	
Midnapore	2. Midnapore	53,090	85	30.84	3	1.08	...	.36	105	34.04	25	9.00	...	...	16	5.76	150	54.36	100	36.94	Ditto.
Hoochly	3. Hoochly and Chinsura	35,983	81	37.00	24	7.92	...	...	104	34.66	53	17.64	...	...	19	6.94	209	66.72	153	45.98	
Howrah	4. Serampore	116,006	269	37.48	86	8.76	2	.19	151	15.46	80	8.16	11	1.06	87	8.86	417	43.64	194	19.92	Ditto.
24-Parganas	5. Howrah																				
	6. Coxsore-Chitpur																				
	7. Manikiala																				
	8. Barnagore																				
	9. South Suburban																				
	10. Khorda or South Bar-																				
	ackpore.																				
	11. Nathali																				
	12. Nawalgarh or North																				
	Harackpore.																				
Calcutta	13. Calcutta	681,500	635	14.64	78	1.32	4	.06	825	14.52	243	4.20	26	.36	804	19.66	1,783	31.32	1,544	27.12	Returns not entered up to date.
Nadia	14. Krishnagar	23,500	46	22.56	...	.36	...	...	33	15.48	3	.64	...	...	8	3.72	43	20.16	46	21.00	
Murshidabad	15. Santipur	30,457	63	24.72	1	.36	...	...	79	31.08	...	...	...	...	16	5.84	89	35.40	55	21.60	Ditto.
Rajshahi	16. Murshidabad	35,376	69	29.80	...	...	...	...	61	20.52	...	...	...	...	16	6.00	83	27.60	85	32.04	
Dacca	17. Burdwan	23,515	45	22.92	...	...	...	...	35	17.76	...	...	...	...	13	6.60	48	24.48	51	25.29	Ditto.
Chittagong	18. Rampur Balia	21,407	37	20.64	...	...	...	...	35	19.66	...	...	...	...	2	1.48	37	20.64	67	37.44	
	19. Sirajganj	23,267	58	29.88	...	...	...	...	29	14.40	...	...	...	...	7	3.60	55	28.52	33	16.28	Ditto.
	20. Dacca	82,321	122	17.76	14	1.12	...	...	74	10.68	6	3.00	...	...	49	7.08	149	21.24	157	22.80	
	21. Chittagong	24,000	18	8.88	...	...	...	...	18	8.88	...	...	...	...	...	...	...	...	...	...	Ditto.
	22. Cuttack	185,192	441	32.16	4	1.80	...	.07	293	19.92	78	5.64	10	.72	179	12.96	...	...	...	...	
	23. Bihar	47,723	178	44.64	12	3.24	...	.24	106	26.64	5	1.20	...	...	27	7.20	156	39.12	112	35.64	Ditto.
	24. Pimpore	44,410	144	58.68	...	...	...	...	82	22.08	13	3.48	...	...	50	14.40	266	65.66	92	24.84	
	25. Gaya	60,383	256	38.16	60	8.88	...	...	240	36.70	64	8.04	...	...	15	3.72	403	60.36	388	65.40	Ditto.
	26. Arrah	46,485	114	29.16	...	...	...	...	89	16.08	4	.96	...	...	18	9.48	82	20.88	170	43.44	
	27. Sasaram	22,713	98	61.72	...	...	...	.48	41	22.68	3	1.20	...	...	15	6.84	84	34.80	84	43.44	Ditto.
	28. Chapra	57,332	96	19.80	...	...	...	...	35	7.32	13	2.64	...	...	30	12.60	85	17.76	136	28.40	
	29. Bettiah	22,740	48	26.20	...	...	...	...	44	23.16	4	.96	...	...	24	12.60	74	41.04	136	35.12	Ditto.
	30. Munshiganj	49,192	109	36.60	...	...	...	.72	72	17.52	4	.96	...	...	20	4.80	112	27.36	136	35.12	
	31. Barhanga	21,477	71	38.60	...	...	...	...	103	16.80	10	2.64	...	...	13	7.20	187	31.40	187	30.60	Ditto.
	32. Barhanga	75,561	177	28.60	...	...	...	...	28	16.80	10	2.64	...	...	60	16.32	209	32.66	187	30.60	
	33. Bhagpur	67,077	200	42.00	...	...	...	...	87	18.24	22	4.92	...	...	78	16.32	209	32.66	228	47.88	Ditto.
	34. Bhagpur	69,146	200	42.00	...	...	...	...	109	18.84	26	4.92	...	...	68	10.68	203	32.04	211	36.98	
	35. Cuttack	47,146	90	22.80	...	...	...	...	33	8.28	8	1.92	...	...	86	11.72	62	22.48	50	19.50	Ditto.
	36. Balasore	20,773	40	23.04	...	...	...	...	33	18.06	5	2.88	...	...	30	11.72	57	32.40	54	28.50	
	37. Puri	28,794	55	32.88	...	...	...	...	40	23.52	1	.48	...	...	3	1.68	44	26.92	60	23.52	Ditto.
	38. Ranchi	20,396	55	32.40	...	...	...	...	40	23.52	1	.48	...	...	3	1.68	44	26.92	60	23.52	
	39. Lohardaga				...	...	...	...	40	23.52	1	.48	...	...	3	1.68	44	26.92	60	23.52	Ditto.
	Total of all towns with a population of 20,000 and over.	2,042,686	6,177	34.43	600	2.88	13	.07	3,005	17.64	733	4.20	92	.48	1,330	9.00	5,982	34.44	5,174	30.36	
	Average of the corresponding month of previous five years.	.....	4,080	34.00	419	2.40	17	.00	2,470	14.52	647	3.78	96	.48	1,516	8.88	5,174	30.36	.....	.....	Ditto.
	Difference + or -	.....	+48	+48	+61	+46	-4	-02	+586	+5.72	+80	+48	-4	Equal	+23	+12	+708	+4.08	.....	.....	

H. J. DYSON, Surgeon-Captain, F.R.C.S.,  
Sanitary Commissioner for Bengal.OFFICE OF SANITARY COMMISSIONER FOR BENGAL,  
The 2nd November 1895.

Supplementary Vital Statistics of Districts and of Towns in Bengal for August 1895, received too late for publication with the figures of that month on the 12th October 1895.

Divisions.	Districts.	BIRTHS.			DEATHS.																AVERAGE OF CORRESPONDING MONTHS OF PREVIOUS FIVE YEARS.	
		Population under registration.	Number registered.	Ratio per 1,000 of population per annum.	CHOLERA.	SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		INJURY.		OTHER CAUSES.		TOTAL OF ALL CAUSES.						
						Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
Bardwan ..	Hooghly ..	1,034,296	1,740	20.16	40	.48	7	.07	1,840	21.24	223	2.59	41	.36	328	3.72	1,488	28.80	2,273	26.28		
	Total for the whole Province ..	71,070,233	152,574	25.68	11,358	1.60	516	.06	113,064	19.08	4,861	.79	4,397	.79	23,196	3.84	166,854	28.40	160,689	27.19		
	Average of corresponding month of past five years.	...	Not available, as birth registration was introduced from the commencement of 1893.	...	14,115	2.28	760	.12	113,374	20.08	4,643	.79	4,384	.79	23,605	3.96	160,800	27.19	...	...		
	Difference + or -	...	...	...	-2,795	-.48	-234	-.04	-160	Equal	-263	Equal	-77	Equal	-467	-.12	-4,046	-7.9	...	...		
District. Hooghly ..	Towns.																					
	Hooghly and Chinsura ..	53,060	60	18.19	1	.36	...	...	60	21.79	20	10.80	...	...	13	6.48	100	39.43	108	38.40		
	Total of all towns with a population of 20,000 and over.	2,389,651	3,631	19.68	453	2.46	29	.12	3,056	15.72	934	4.80	100	.48	1,463	7.68	6,060	31.08	5,865	26.00		
	Average of corresponding month of past five years.	.....	4,063	21.00	743	3.79	30	.12	2,705	13.92	757	3.84	118	.48	1,604	8.16	5,955	30.00	...	...		
	Difference + or -	.....	-271	-1.33	-308	-1.56	-1	Equal	+351	+1.80	+177	+96	-16	Equal	-111	-.48	+83	+4.8	...	...		

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,  
The 2nd November 1895.H. J. DYSON, Surgeon-Captain, F.R.C.S.,  
Sanitary Commissioner for Bengal.



**IRRIGATION DEPARTMENT, BENGAL.**  
**IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1895-96.**  
*Areas leased for irrigation up to end of September 1895.*

Circles.	District.	Canal.	DETAILS OF AREAS LEASED.											Rainfall, 1894-95.		REMARKS.					
			Estimated full discharge.	Average discharge in month.	Discharge utilized.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Season leases.					GRAND TOTAL.	During month.	Up to end of month.						
								Long-term leases.	Kharif.	Rabi.	Sugarcane.	Bhadol.					Hot-weather.	Total.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Oxalis	Outback	Taldanda, 1st reach	1,342	163	116	9,847	9,406	9,406	Acres.	48	Acres.	23	Acres.	66	9,402	8,75	64,50	9,00	47,80		
		Ditto, 2nd "	566	163	280	15,976	15,085	15,085	Acres.	608	Acres.	100	Acres.	803	15,083	13,30	59,50	7,55	48,70		
		Machgon	776	230	280	46,407	45,503	47,253	Acres.	56	Acres.	88	Acres.	1,057	40,253	17,55	61,84	5,98	57,24		
		Kendrapara	1,067	949	830	1,408	2,291	1,258	Acres.	1,974	Acres.	68	Acres.	74	1,310	10,05	64,87	7,95	50,08		
		Gobri	572	50	49	1,408	1,408	1,258	Acres.	74	Acres.	68	Acres.	4	9,402	8,30	No gauge.	7,40	45,54		
		Do. Extension	846	58	58	1,408	1,408	1,258	Acres.	4	Acres.	68	Acres.	4	9,402	8,30	No gauge.	7,40	45,54		
		Paramundi	885	50	50	1,408	1,408	1,258	Acres.	4	Acres.	68	Acres.	4	9,402	8,30	No gauge.	7,40	45,54		
		High Level, Range I	608	228	147	15,914	15,085	15,085	Acres.	1,214	Acres.	5	Acres.	1,214	14,083	8,33	45,03	5,41	55,14		
		Ditto	737	12	12	8,33	2,331	2,331	Acres.	450	Acres.	5	Acres.	450	8,33	8,33	No gauge.	No gauge.	No gauge.		
		Jajpur Canal	700	21	15	8,33	2,331	2,331	Acres.	181	Acres.	5	Acres.	181	8,33	8,33	No gauge.	No gauge.	No gauge.		
Sour. W. Br.	Balsore	High Level, Range II	737	12	15	8,33	2,331	2,331	Acres.	3,366	Acres.	546	Acres.	247	10,031	7,42	62,74	Ditto.	40,78		
		Total	.....	.....	.....	1,12,711	1,12,853	1,07,540	Acres.	56	Acres.	408	Acres.	8,436	1,10,276	.....	.....	.....	.....		
		Total of the corresponding period of last year	.....	.....	.....	.....	.....	77,044	Acres.	4,126	Acres.	344	Acres.	16,318	94,157	.....	.....	.....	.....		
		Midnapore	1,411	461	321	53,478	59,766	63,871	Acres.	.....	Acres.	.....	Acres.	.....	53,871	8,86	43,38	7,04	37,08		Whole month discharge- inc. 23 days discharging.
		Panchkura	523	104	89	6,501	2,439	6,945	Acres.	.....	Acres.	.....	Acres.	.....	6,945	3,13	23,64	6,03	61,71		
		Tidal Reaches, Ranges I & II	.....	.....	.....	523	376	1,136	Acres.	.....	Acres.	.....	Acres.	.....	1,136	.....	.....	.....	.....		
		Total	.....	.....	.....	60,899	32,631	61,871	Acres.	.....	Acres.	.....	Acres.	.....	61,871	.....	.....	.....	.....		
		Total of the corresponding period of last year	.....	.....	.....	.....	.....	60,938	Acres.	.....	Acres.	.....	Acres.	.....	60,938	.....	.....	.....	.....		
		Western Main	4,542	2,074	272	13,732	13,802	13,400	Acres.	1,276	Acres.	.....	Acres.	1,533	14,533	7,92	46,54	5,36	49,55		
		Buxar	1,226	637	513	44,251	50,008	39,079	Acres.	7,029	Acres.	.....	Acres.	1,255	44,834	.....	.....	.....	.....		
Bong.	Shahabad	Arrah	2,000	1,665	1,135	120,766	119,583	104,411	Acres.	5,734	Acres.	32	Acres.	15,673	124,033	5,38	31,73	13,35	40,54		
		Patna and Gaya.	1,466	1,280	784	2,063	2,013	1,731	Acres.	315	Acres.	.....	Acres.	44	2,130	9,83	55,57	24,93	56,70		
		Total	.....	.....	.....	255,310	248,786	225,171	Acres.	10,407	Acres.	60	Acres.	12,001	124,631	.....	.....	.....	.....		
		Total of the corresponding period of last year	.....	.....	.....	.....	.....	225,171	Acres.	26,389	Acres.	93	Acres.	13,029	264,231	.....	.....	.....	.....		
		Grand total	.....	.....	.....	4,28,939	402,470	384,892	Acres.	36,617	Acres.	121	Acres.	47,556	269,157	.....	.....	.....	.....		
		Grand total of the corresponding period of last year	.....	.....	.....	.....	.....	384,892	Acres.	7,914	Acres.	93	Acres.	47,546	442,493	.....	.....	.....	.....		
		Grand total of the corresponding period of last year	.....	.....	.....	.....	.....	384,892	Acres.	7,914	Acres.	93	Acres.	47,546	442,493	.....	.....	.....	.....		
		Grand total of the corresponding period of last year	.....	.....	.....	.....	.....	384,892	Acres.	7,914	Acres.	93	Acres.	47,546	442,493	.....	.....	.....	.....		
		Grand total of the corresponding period of last year	.....	.....	.....	.....	.....	384,892	Acres.	7,914	Acres.	93	Acres.	47,546	442,493	.....	.....	.....	.....		
		Grand total of the corresponding period of last year	.....	.....	.....	.....	.....	384,892	Acres.	7,914	Acres.	93	Acres.	47,546	442,493	.....	.....	.....	.....		

\* There are no separate leases for sugarcane on the Sone Canal. All leased fields of that crop now come under one of the other heads.

O. C. LEEES,  
Under-Secy. to the Govt. of Bengal.

CALCUTTA,  
The 5th November 1895.

## CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 2nd November 1895,  
as compared with the corresponding week of the previous year.

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 2ND NOVEMBER 1895.			WEEK ENDING SATURDAY, THE 3RD NOVEMBER 1894.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	542	1,02,525	1,737	802	32,240	482
Jute	565	1,64,775	2,787	327	1,24,150	2,190
Firewood	125	72,150	1,098	83	44,400	641
Other articles	918	1,77,935	2,607	686	1,50,300	2,281
Total	2,150	5,17,385	8,269	1,998	3,51,090	5,594

## BENGAL CENTRAL RAILWAY.

Abstract of principal commodities carried over the Bengal Central Railway during the month of  
August 1895, as compared with the same month of the previous year.

STAPLES.	1895.		1894.		TOTAL.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1895.	1894.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal and Coke carried for the Public and Foreign Railways.	657	.....	788	.....	657	788	.....	131
Cotton, raw	150	4	.....	8	154	8	146	.....
Cotton, manufactured—	.....	.....	136	.....	.....	136	.....	136
Twist and yarn, European	509	3	180	3	512	183	329	.....
Piece-goods, European	.....	.....	1	.....	.....	1	.....	1
Ditto, Indian	.....	.....	.....	.....	.....	.....	.....	.....
Non-intoxicating—	.....	5	1	1	5	2	3	.....
Others	.....	.....	.....	.....	.....	.....	.....	.....
Dyes and Tans—	1	.....	1	.....	1	1	.....	.....
Cuteb	1	57	2	94	88	96	.....	8
Turmeric	.....	.....	.....	.....	.....	.....	.....	.....
Grain and pulse—	121	4	38	26	125	64	61	.....
Rice in the husk	46	776	256	13	722	269	453	.....
Do. not in the husk	168	24	156	26	190	182	8	.....
Gram and pulse	.....	.....	1	.....	.....	1	.....	1
Others	.....	.....	.....	.....	.....	.....	.....	.....
Hides and skins—	.....	.....	.....	.....	.....	.....	.....	.....
Hides of cattle—	.....	16	.....	21	16	21	.....	5
Dressed or tanned	.....	.....	.....	.....	.....	.....	.....	.....
Raw	.....	.....	.....	.....	.....	.....	.....	.....
Skins of Sheep, &c.—	.....	.....	.....	.....	.....	.....	.....	.....
Dressed or tanned	.....	.....	.....	.....	.....	.....	.....	.....
Raw	.....	.....	.....	.....	.....	.....	.....	.....
Jute—	96	5,061	.....	5,093	5,767	5,093	668	46
Raw	19	.....	62	5	19	67	.....	.....
Gunny-bags and cloth	6	.....	2	.....	6	2	4	.....
Leather, manufactured	.....	.....	.....	.....	.....	.....	.....	.....
Liquors—	1	.....	5	.....	1	5	.....	4
Wines	.....	.....	.....	.....	.....	.....	.....	.....
Metals—	18	7	15	8	25	23	2	.....
Brass, unwrought	51	9	41	2	60	43	17	.....
Copper, wrought	.....	13	1	8	14	9	5	.....
Brass, do.	.....	.....	.....	.....	.....	.....	.....	.....
Oils—	373	1	193	.....	374	183	191	.....
Kerosine	3	.....	1	.....	3	1	2	.....
Castor	20	.....	13	22	20	35	.....	15
Cocconut	164	.....	190	4	164	194	.....	30
Others	.....	.....	.....	.....	.....	.....	.....	.....
Oilseeds—	.....	41	132	8	41	8	33	.....
Linseed	19	.....	.....	48	19	180	.....	161
Rape and mustard	.....	5	.....	396	5	388	.....	381
Til or jinjili	.....	.....	.....	1	.....	1	.....	1
Others	9	.....	4	.....	9	4	5	.....
Paper and pasteboard	.....	.....	.....	.....	.....	.....	.....	.....
Provisions—	8	.....	6	.....	8	6	.....	2
Ghee	.....	15	.....	212	45	213	.....	168
Dried fruits and nuts	31	22	49	54	69	103	.....	34
Others	47	2	555	2	400	557	.....	157
Salt	398	.....	.....	.....	.....	.....	.....	.....
Spices—	10	628	22	117	636	139	497	.....
Hotel-nuts	2	.....	.....	.....	2	.....	.....	2
Pepper	.....	.....	12	79	.....	91	.....	89
Chillies	.....	7	4	8	15	12	3	.....
Others	8	.....	.....	.....	19	64	.....	65
Stone and lime	17	2	84	.....	.....	.....	.....	22
Sugar—	7	2	8	23	9	31	.....	.....
Refined or crystallized, including sugar-candy.	.....	.....	.....	.....	.....	.....	.....	.....
Unrefined, viz., molasses and jaggery or gur, and other saccharine produce.	260	159	75	556	419	609	.....	190
Tea—	3	.....	.....	.....	3	.....	.....	.....
Indian	33	.....	45	2	33	47	.....	14
Timber	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco—	210	16	135	58	226	183	43	.....
Unmanufactured	435	214	914	303	641	1,217	.....	536
All other articles of merchandise	.....	.....	.....	.....	.....	.....	.....	.....
Total	3,994	7,637	4,116	7,170	11,551	11,286	2,463	2,196

F. C. W. DOVER,  
For Examiner of Accounts.

CALCUTTA, the 1st November 1895.

## EASTERN BENGAL STATE RAILWAY.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of August 1895, as compared with the same month of the previous year.

STAPLES.	1895.		1894.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1895.	1894.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal and Coke carried for the Public and Foreign Railways.	2,186	14,661	2,476	25,379	10,847	27,855	...	11,006
Cotton, raw	1	73	1	59	74	59	15	...
Cotton, manufactured—								
Twist and yarn, European	314	...	397	...	314	397	...	83
Ditto, Indian	214	169	330	135	372	304	...	12
Piece-goods, European	3,390	...	2,250	2	3,390	2,251	1,078	...
Ditto, Indian	28	3	17	...	32	17	15	...
Drugs and Chemicals—								
Intoxicating, other than opium	3	...	10	1	3	11	...	8
Non-intoxicating—								
Cinchona bark	...	...	...	...	...	...	...	...
Others	15	5	14	6	30	20	...	...
Dyes and Tans—								
Indigo	...	...	...	...	...	...	...	...
Myrabolams	...	...	...	...	...	...	...	...
Catch	43	...	50	...	43	50	...	7
Turmeric	6	131	20	182	137	202	...	65
Aniline dyes	...	...	...	...	...	...	...	...
Others	7	...	10	4	7	14	...	7
Grain and pulse—								
Wheat	17	65	53	3	82	56	26	...
Rice in the husk	452	253	401	864	703	1,469	...	1,144
Rice not in the husk	2,480	2,330	2,008	1,447	4,826	3,455	971	...
Jawar and bajra	...	...	...	...	...	...	...	...
Gram and pulse	1,147	468	1,640	1,202	1,615	2,911	...	1,228
Others	8	21	4	13	29	17	12	...
Hides and skins—								
Hides of cattle—								
Dressed or tanned	...	...	...	...	...	...	...	...
Raw	...	...	...	...	...	...	...	...
Skins of sheep, &c.—	23	450	9	589	478	505	...	120
Dressed or tanned	...	...	...	...	...	...	...	...
Raw	...	...	...	...	...	...	...	...
Horns	...	1	...	3	1	3	...	3
Jute—								
Raw	94	50,234	10	60,578	50,324	60,848	...	7,530
Gunnybags and cloth	125	818	190	152	943	342	601	...
Lac—								
Stick	...	40	2	17	40	19	30	...
Shell	...	...	...	...	...	...	...	...
Leather, manufactured	23	...	8	...	28	8	20	...
Liquors—								
Beer	22	...	32	...	22	32	...	10
Spirits	...	...	...	...	...	...	...	...
Wines	45	...	31	...	45	31	...	6
Metals—								
Copper, unwrought	...	...	...	...	...	...	...	...
Brass, do.	6	...	28	...	6	28	...	22
Copper, wrought	...	...	7	...	...	7	...	7
Brass, do.	202	63	224	78	267	302	...	35
Iron	767	48	1,018	11	815	1,029	...	214
Others	52	16	63	12	68	80	...	12
Oils—								
Kerosine	6,420	15	5,663	19	6,444	5,672	572	...
Castor	4	...	19	7	4	26	...	22
Cocconut	80	...	100	...	80	100	...	20
Others	457	2	476	10	459	486	...	27
Oilseeds—								
Linseed	...	201	...	425	201	425	...	124
Rape and mustard	255	414	207	853	261	1,151	...	421
Til or linjill	1	350	10	470	251	480	...	329
Poppy	...	...	...	...	...	...	...	...
Earthenware	...	...	...	...	...	...	...	...
Castor	...	...	...	...	...	...	...	...
Others	19	11	37	10	30	47	...	17
Opium	...	...	...	...	...	...	...	...
Paper and pasteboard	106	...	402	118	108	580	...	472
Provisions—								
Ghee	57	1	73	1	58	74	...	16
Dried fruits and nuts	37	...	15	...	37	15	22	...
Others	607	140	758	236	637	994	...	187
Railway plant and rolling-stock carried for the Public and Foreign Railways—								
Locomotives, engines and tenders and parts thereof	...	...	...	...	...	...	...	...
Carriages and trucks and parts thereof	...	...	...	...	...	...	...	...
Materials—								
Steel rails and fish-plates, sleepers and keys of steel and cast-iron.	...	...	...	...	...	...	...	...
Other sorts	...	...	13	...	...	13	...	13
Salt	3,893	22	4,984	91	3,915	5,075	...	1,160
Saltpetre, do.—								
Saltpetre	...	...	...	...	...	...	...	...
Other saline substances	...	...	...	...	...	...	...	...
Silk, raw—								
Foreign	...	...	...	...	...	...	...	...
Indian	...	28	...	19	28	19	9	...



## DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for the week ended 26th October 1895, on 161.40 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,178	22,972 0 0	80,008 30	9,923 0 0	52 0 0	32,947 0 0	7,330	6,189	13,519
per mile of railway ...	.....	142 5 3	.....	61 7 8	0 5 2	204 2 1	.....	.....	.....
previous 16 weeks of half-year ...	311,000	2,43,525 7 0	12,74,086 30	1,46,628 9 0	507 0 0	3,90,751 0 0	104,037	50,001	154,038
Total for 16½ weeks	339,078	2,66,497 7 0	13,55,207 20	1,56,551 9 0	649 0 0	4,23,698 0 0	111,367	56,190	167,557
COMPARISON.									
Total for corresponding week of previous year ...	17,998	18,013 1 1	67,996 30	11,466 2 0	88 11 9	30,107 14 10	7,420	4,123	11,543
per mile of railway corresponding week of previous year ...	.....	115 5 2	.....	71 0 8	0 8 9	186 14 7	.....	.....	.....
Total for corresponding 17 weeks of previous year ...	309,135	2,50,103 1 16	11,02,720 10	1,48,122 6 8	1,008 0 0	3,90,236 1 0	101,740	56,132	157,872

\* The increase in the outward traffic is chiefly at Delhi and Kalka.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic and Mileage for the week ended 26th October 1895, on 813 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	284,480	1,15,500 0 0	10,60,780 0	2,65,090 0 0	20,030 0 0	4,08,410 0 0	29,300	45,800	75,100
per mile of railway ...	349	142 0 0	1,316 0	327 0 0	10 0 0	748 0 0	.....	.....	.....
previous 16 weeks of half-year ...	2,805,567	13,22,207 0 0	1,39,88,373 0	30,16,779 0 0	2,05,861 0 0	45,44,037 0 0	465,963	545,985	1,011,948
Total for 17 weeks	3,089,987	14,37,707 0 0	1,50,49,153 0	32,82,750 0 0	2,32,791 0 0	40,53,347 0 0	495,263	591,785	1,087,048
COMPARISON.									
Total for corresponding week of previous year ...	163,791	95,029 0 0	10,45,007 0	3,35,496 0 0	38,018 0 0	3,68,513 0 0	27,381	42,631	70,012
per mile of railway corresponding week of previous year ...	200	117 0 0	1,286 0	290 0 0	17 0 0	424 0 0	.....	.....	.....
Total to corresponding date of previous year ...	2,910,301	13,34,507 0 0	1,53,40,167 0	31,75,684 0 0	3,04,686 0 0	48,14,757 0 0	485,947	610,430	1,096,377

\* Audited up to 31st August 1895.

† Excluding steamer earnings.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic and Mileage for the week ended 26th October 1895, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	34,010	12,600 0 0	92,700 0	9,220 0 0	250 0 0	22,070 0 0	4,235	3,171	7,406
per mile of railway ...	272	101 0 0	742 0	74 0 0	2 0 0	177 0 0	.....	.....	.....
previous 16 weeks of half-year ...	495,356	1,64,525 0 0	11,01,507 0	1,04,633 0 0	3,034 0 0	2,72,192 0 0	60,534	44,381	104,915
Total for 17 weeks	529,366	1,77,125 0 0	11,94,017 0	1,13,853 0 0	3,284 0 0	2,94,203 0 0	64,770	47,472	112,242
COMPARISON.									
Total for corresponding week of previous year ...	25,300	9,643 0 0	63,313 0	6,338 0 0	100 0 0	16,081 0 0	3,944	2,353	6,297
per mile of railway corresponding week of previous year ...	203	77 0 0	523 0	51 0 0	1 0 0	129 0 0	.....	.....	.....
Total to corresponding date of previous year ...	498,806	1,60,775 0 0	9,87,003 0	93,886 0 0	3,186 0 0	2,58,556 0 0	62,830	39,785	102,615

\* Audited up to 31st August 1895.







# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, NOVEMBER, 13, 1895.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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### FINANCIAL RESOLUTION.

#### FINANCIAL DEPARTMENT—FINANCE.

*Darjeeling, the 5th November 1895.*

#### RESOLUTION—No. 5583F.

THE Lieutenant-Governor is now in a position to review the actual financial results of the year 1893-94, the revised estimates for the year 1894-95, and the budget estimates for 1895-96. The Accountant-General's memorandum on the accounts of the first year has been received, and although the accounts for 1894-95 have not yet been finally closed, the Appropriation Report affords sufficient materials for framing an approximate estimate of the financial position of the province at the close of that year. The figures of the revenue and expenditure of the first five months of the current year have been received from the Accountant-General, and these are sufficient to form the basis for a review of the budget estimates for 1895-96.

## PART I.

## ACCOUNTS OF 1893-94.

2. The approximate actuals adopted in the Financial Resolution No. 6433F., dated the 8th December 1894, are compared in the following table with the final actuals now reported by the Accountant-General in his memorandum on the accounts of 1893-94:—

RECEIPTS.		HEADS.	OUTGOINGS.	
Approximate actuals adopted in December 1894.	Final actuals.		Approximate actuals adopted in December 1894.	Final actuals.
1	2	3	4	5
Rs.	Rs.		Rs.	Rs.
3,16,18,382	3,16,18,455	Principal Heads of Revenue ...	61,63,389	61,62,920
1,38,187	1,38,187	Interest ...	1,43,260	1,43,259
3,902	3,902	Post Office and Telegraph ...	8,217	8,217
38,24,842	38,24,841	Civil Departments ...	2,38,90,190	2,38,88,231
10,67,515	10,67,526	Miscellaneous ...	32,87,588	32,86,155
.....	.....	Famine Relief and Insurance ...	—11	.....
35,34,842	35,34,841	Railways ...	3,792	3,792
25,45,364	25,45,364	Irrigation and Navigation ...	53,79,698	53,79,698
5,45,209	5,45,209	Buildings and Roads ...	26,81,008	26,81,008
.....	.....	Contributions ...	13,57,715	13,56,179
4,32,78,243	4,32,78,325	Total ...	4,29,14,846	4,29,09,459
22,55,172	22,55,172	Opening balance ...	.....	.....
.....	.....	Closing balance ...	26,18,569	26,24,038
4,55,33,415	4,55,33,497	GRAND TOTAL ...	4,55,33,415	4,55,33,497
		Provincial Surplus ...	3,63,397	3,68,866

3. The approximate actuals adopted in December 1894 assumed that the year 1893-94 had opened with a credit balance of Rs. 22,55,172, and had closed with a balance of Rs. 26,18,569; that the total amount available for expenditure was Rs. 4,55,33,415, and that Rs. 4,29,14,846 had been spent. The actual result was more favourable than this by Rs. 5,469. The amount actually available for expenditure was Rs. 4,55,33,497, and the amount actually expended Rs. 4,29,09,459, leaving a closing balance of Rs. 26,24,038.

4. There was an increase of Rs. 82 only on the Receipt side, and a decrease of Rs. 5,387 on the Expenditure side. The fluctuations in expenditure were chiefly under General Administration (+ Rs. 1,154), Police (— Rs. 4,999), Marine (+ Rs. 1,886), Miscellaneous (— Rs. 1,433), and Contributions (— Rs. 1,536).

5. The transactions under the head of Provincial loans and advances, not included in the cash account, were as follows:—

HEADS.	Balance outstanding on the 1st April 1893.	Repayments.	Outgoings.	Balance outstanding on the 31st March 1894.
1	2	3	4	5
<b>CLASS I.</b>	Rs.	Rs.	Rs.	Rs.
<i>Advances to Cultivators.</i>				
Loans under the Land Improvement Act, XIX of 1883 ...	2,22,747	53,534	30,040	1,99,253
Advances to cultivators under Act XIII of 1884 ...	3,34,180	1,59,595	1,14,096	2,88,681
Total ...	5,56,927	2,13,129	1,44,136	4,87,934
<b>CLASS II.</b>				
<i>Advances under Special Laws.</i>				
Embankment and Drainage— Zamindari embankment advances ...	29,158	19,793	1,88,543	1,97,908
<i>Drainage Advances.</i>				
Serampore sluice ...	39,386	39,483	97	.....
Daman basin ...	59,768	2,409	2,409	59,769
Ampta drainage ...	1,203	.....	183	1,386
Howrah ditto ...	4,17,064	.....	98,810	5,15,874
Nadia-Mahesganj bil ...	17	.....	.....	17
Rajapur drainage ...	9,22,369	8,486	43,631	9,57,514
Dankuni ditto ...	(—)1,390	1,016	1,201	(—)1,205
Pratapkhali ditto ...	.....	.....	.....	.....
Total ...	14,67,575	71,187	3,34,874	17,31,263
<b>CLASS III.</b>				
Loans to Landholders ...	4,15,635	1,58,878	2,72,000	5,28,757
<b>CLASS IV.</b>				
Loans to Mufassal Municipalities	2,43,639	11,108	2,98,000	5,30,531
Ditto District and other Local Funds ...	3,98,555	30,418	59,000	4,27,136
Loans to the Chittagong Port Fund ...	2,00,000	25,000	.....	1,75,000
Total ...	8,42,194	66,526	3,57,000	11,32,667
<b>GRAND TOTAL</b> ...	32,82,331	5,09,720	11,08,010	38,80,621

The increase of nearly six lakhs in the balance outstanding is due in almost equal proportions to the prosecution of agricultural drainage schemes and the construction and repair of embankments in the deltaic districts, and to the policy of encouraging mufassal municipalities to borrow money for the provision of filtered water and of improved drainage arrangements.

## PART II.

## Revised Estimate, 1894-95.

6. The following table shows the revised estimates as passed by the Government of India in March last and the estimates as now adopted by the Government of Bengal, with reference to the approximate actuals of the year:—

RECEIPTS.	Revised estimate passed by the Government of India.	Approximate actuals now adopted.	EXPENDITURE.	Revised estimate passed by the Government of India.	Approximate actuals now adopted.
1	2	3	4	5	6
Opening balance ...	Rs. 26,24,000	Rs. 26,24,038	Direct demand on the Revenues—	Rs.	Rs.
Principal Heads of Revenue—			1. Refunds and Drawbacks ...	1,51,000	1,64,200
I.—Land Revenue ... { Proper ...	1,00,10,000	1,00,90,530	2. Assignments and Compensations ...	1,35,000	1,37,500
... { Adjustments ...	—14,60,000	—15,35,873	3. Land Revenue ...	36,00,000	35,80,000
III.—Salt ...	1,29,000	1,41,201	4. Salt ...	40,000	50,200
IV.—Stamps ...	1,25,35,000	1,25,25,860	5. Stamps ...	5,05,000	4,85,000
V.—Excise ...	31,87,000	31,40,587	6. Excise ...	1,60,000	1,58,500
VI.—Provincial Rates ...	43,00,000	43,00,150	7. Provincial Rates ...	74,000	69,500
VII.—Customs ...	65,000	73,800	8. Customs ...	7,75,000	6,45,700
VIII.—Assessed Taxes ...	22,50,000	22,81,021	9. Assessed Taxes ...	91,000	80,500
IX.—Forests ...	4,00,000	3,97,800	10. Forests ...	2,10,000	1,80,000
X.—Registration ...	6,80,000	6,78,252	11. Registration ...	4,05,000	4,02,600
Total ...	3,20,38,000	3,21,02,634	Total ...	61,76,000	59,94,500
XII.—Interest ...	1,80,000	1,90,471	12. Interest on Ordinary Debt ...	1,71,000	1,60,000
Post-office, Telegraph and Mint—			Post-office, Telegraph and Mint—		
XIII.—Post-office ...	5,000	4,402	13. Post-office ...	8,000	9,200
Receipts by Civil Department—			Salaries and Expenses of Civil Department—		
XVI.—Law and Justice—			14. General Administration ...	17,20,000	17,10,000
Courts of Law ...	8,60,000	8,72,530	15. Law and Justice ... { Courts of Law ...	89,95,000	89,00,000
Jails ...	7,80,000	8,02,001	... { Jails ...	20,50,000	20,07,000
XVII.—Police ...	2,50,000	2,36,045	16. Police ...	50,12,000	50,00,000
XVIII.—Marine ...	9,45,000	9,32,053	17. Marine ...	8,51,000	8,03,000
XIX.—Education ...	5,70,000	6,70,031	18. Education ...	26,10,000	26,37,000
XX.—Medical ...	2,10,000	2,05,158	19. Medical ...	17,90,000	15,13,000
XXI.—Scientific and other Minor Departments,	1,85,000	2,04,045	20. Political ...	30,000	30,000
Total ...	38,00,000	38,73,063	21. Scientific and other Minor Departments	4,37,000	4,53,000
Miscellaneous—			Total ...	2,43,91,000	2,43,44,000
XXII.—Receipts in aid of Superannuation ...	68,000	75,630	Miscellaneous—		
XXIII.—Stationery and Printing ...	1,22,000	1,50,510	22. Superannuation, &c. ...	17,80,000	17,80,000
XXV.—Miscellaneous ...	9,35,000	10,12,073	23. Stationery and Printing ...	14,14,000	11,30,000
Total ...	11,25,000	12,16,222	24. Miscellaneous ...	2,45,000	2,20,000
Railways—			Total ...	34,40,000	31,30,000
XXVI.—State Railways (Net receipts) ...	43,00,000	43,32,224	Railway (Revenue Account)—		
Irrigation—			25. Subsidized Companies—Land, &c. ...		
XXIX.—Major works (direct receipts) ...	14,60,000	15,24,040	Irrigation—		
XXX.—Minor works and navigation—			26. Major Works—		
By Public Works Department ...	6,80,000	6,96,613	Working Expenses ...	14,67,000	15,72,000
By Civil Department ...	2,03,000	1,81,347	Interest on Debt ...	24,59,000	24,50,000
Total ...	23,43,000	24,01,000	27. Minor Works and Navigation—		
Buildings and Roads—			By Public Works Department ...	15,50,000	14,07,000
XXXII.—Civil Works—			By Civil Department ...	4,000	4,000
By Public Works Department ...	2,45,000	2,35,308	Total ...	54,70,000	53,03,000
By Civil Department ...	2,45,000	2,40,000	Buildings and Roads—		
Total ...	4,90,000	4,75,308	28. Civil Works—		
Contributions ...	12,000	11,500	By Public Works Department ...	24,44,000	24,90,000
Total ...	4,42,97,000	4,46,10,722	By Civil Department ...	2,60,000	2,30,000
GRAND TOTAL ...	4,09,21,000	4,72,43,760	Total ...	27,04,000	27,20,000
			Contributions ...	12,30,000	12,00,000
			Total ...	4,35,48,000	4,39,20,000
			Closing Balance ...	33,75,000	43,23,000
			GRAND TOTAL ...	4,09,21,000	4,73,43,760
			Provincial Surplus (+) ...	+7,40,000	+16,80,000

## RECEIPTS.

7. Land Revenue.—The revised estimate of total land revenue receipts for 1894-95 was placed at Rs. 3,87,00,000, which included Rs. 50,000 for recoveries from landholders on account of survey charges which are



wholly Imperial. The actual collections, however, which included only Rs. 512 on account of such charges, amounted to Rs. 3,89,10,164. The 12 per cent. on collections from Government estates aggregated Rs. 4,84,156, against Rs. 4,75,000 adopted in the revised estimate of March last. The Provincial share of land revenue was therefore one-fourth of (Rs. 3,89,10,164—512—4,84,156) + 4,84,156 or 96 06,374 + 4,84,156 = 1,00,90,530. This amount has now been adopted as the final estimate of the Provincial share of land revenue (proper) for 1894-95. The adjustments between the Imperial and Provincial will probably result in a net deduction of Rs. 15,35,873, as shown below:—

	Revised estimate passed by the Government of India.	Approximate actuals now adopted.
	Rs.	Rs.
(a) Lump contribution under the Provincial contract ... ..	(-)14,39,000	(-)14,39,000
(b) Interest payable on advances received for the remodelling of the Hidjili Tidal Canal ...	(-)21,000	(-)20,817
(c) Special contribution to Imperial Funds ...	(-)3,00,000	(-)3,00,000
(d) Further advance for remodelling the Hidjili Tidal Canal ... ..	+1,06,000	+1,06,322
(e) Grant for expenditure on Imperial, Civil and Military Works transferred to local bodies ...	+14,000	+19,998
(f) Grant for loss sustained consequent on the reservation of the Western Duars for the Khedda Department ... ..	+11,000	+17,971
(g) Salary of Mr. Davies, the Probationary Gardener at Sibpur ... ..	+1,000	+1,534
(h) Grant for the additional establishment entertained in the Calcutta Custom House on the introduction of the new Tariff Act ...	+1,64,000	+68,060
(i) Contribution towards the cost of a prison van ...	+2,000	+2,234
(k) Assignment for the Gnatong guard ...	+2,000	+7,825
Total ... ..	(-)14,60,000	(-)15,35,873

8. (e) The Government of India, while passing orders on the budgets for 1895-96, allowed a credit of Rs. 14,000 in the revised estimates for 1894-95 on account of the maintenance of certain Imperial Military and Civil Works permanently transferred to local agencies, and also for the petty construction and repairs of certain other Imperial buildings entrusted to their charge during the year. The actual expenditure incurred by local bodies in 1894-95, including percentage charges for establishment, &c., as reported by the Public Works Department, amounted to Rs. 19,998, for which credit has been taken provisionally and subject to the final sanction of the Government of India.

(f) The Government of India, in Military Department letter No. 5873D., dated the 15th December 1893, sanctioned the payment of Rs. 17,971 a year as compensation for the loss entailed on Provincial revenues by the reservation of the Western Duars of Jalpaiguri for the Khedda Department. As the Duars were reserved from the 29th July 1893, and a profit of Rs. 7,165 had already been obtained by the Civil Department by the sale of elephants captured in the first four months of 1893-94, a credit for (Rs. 17,971—7,165) = Rs. 10,806 only was paid by the Khedda Department in that year. The full compensation of Rs. 17,971 will, however, be claimed for 1894-95.

(g) The Government of India promised to meet the salary of Mr. Davies as long as he was employed as a probationer in the Royal Botanic Gardens, but on the 21st November 1894 he was appointed to act for Mr. Lane, the Assistant Curator of the Gardens, who was deputed to Allahabad for 18 months. A credit for Rs. 1,534, being his pay for eight months and 20 days at Rs. 150 per mensem, and for Rs. 234 for exchange compensation allowance, has been taken in the revised estimates for 1894-95.

(h) Since the introduction of the new Tariff Acts a large additional establishment has been entertained in the Calcutta Custom House, and the Government of India, in the Finance and Commerce Department Resolution No. 1521Ex., dated 2nd April 1895, decided that the actual expenditure incurred

on this account would be met from an assignment from Imperial to Provincial revenues, and adjusted through the Land Revenue head. The charges amounted to Rs. 68,060, and credit for this amount has accordingly been taken in the revised estimates for 1894-95.

(k) The Government of India, in the Finance and Commerce Department letter No. 3879A., dated the 13th August 1895, sanctioned an assignment from Imperial to Provincial revenues of Rs. 7,825 on account of charges incurred by the Local Government in 1894-95 in connection with the maintenance of the Military Police at Gnatong, and this amount has accordingly been included under Adjustments.

9. *Salt*.—The original estimate under this head was Rs. 80,000, but in view of the high receipts from rent of warehouses due to the very large stock of bonded salt in the golahs, the revised estimate was raised to Rs. 1,20,000. The actual realizations amounted to Rs. 1,41,291.

10. *Excise*.—The receipts under this head amounted to Rs. 1,25,62,350 against Rs. 1,25,50,000, the revised estimate passed by the Government of India. One-fourth of this sum, or Rs. 31,40,587, has been taken as the share of the Local Government.

11. *Provincial Rates*.—The budget estimate of total revenue from Provincial Rates for 1894-95 was originally passed for Rs. 46,60,000, but in the revised estimate this was reduced to Rs. 43,00,000. The decrease was chiefly nominal, and was due to the fact that owing to a change in the mode of adjusting the cost, no credit was taken in the Provincial accounts for "Recoveries of the proportionate cost of establishment for collecting road cess." The cost was debited, from 1st April 1894, direct to the District Funds in the Local Funds Budget, instead of being passed through both sides of the Provincial accounts. The actual receipts amounted to Rs. 43,09,150, as shown below:—

	Budget estimate. Rs.	Revised estimate. Rs.	Actuals. Rs.
Public works cess ... ..	42,00,000	41,60,000	41,78,635
Proportionate cost of collecting road cess ... ..	3,20,000	.....	3,268
General rates for the management of private estates ... ..	1,40,000	1,40,000	1,27,167
Total	46,60,000	43,00,000	43,09,150

12. *Customs*.—The Provincial receipts under this head amounted to Rs. 73,380 against Rs. 65,000, the revised estimate passed by the Government of India, and Rs. 55,000, the budget estimate for the year. The landing charges for passengers' baggage, confiscations and penalties showed an increase owing to the imposition of import duties. A large number of articles were brought into the Custom House, and subjected to confiscation and penalties. There was also an increase in transhipment fees owing to the same cause.

13. *Assessed Taxes*.—The revised estimate under this head was placed at Rs. 45,00,000, but the actuals have amounted to Rs. 45,63,242. One half of this sum, or Rs. 22,81,621, has accordingly been taken as the Provincial share of the receipts.

14. *Interest*.—The actuals amounted to Rs. 1,99,471 against the revised estimate of Rs. 1,86,000, and their details are these:—

	Revised estimate. Rs.	Actuals. Rs.
Class I.—Interest on advances to cultivators ...	26,000	26,400
" II.—Ditto under special laws	22,000	29,261
" III.—Interest on loans to landholders and other notabilities ...	19,000	23,414
" IV.—Interest on loans to Municipalities, Dis- trict Boards and other Public Bodies	65,000	65,800
Interest on Government securities ...	13,000	14,257
Miscellaneous ...	41,000	40,339
Total	1,86,000	1,99,471

15. *Jails*.—The original estimate under this head for 1894-95 was passed by the Government of India for Rs. 9,55,000, with reference to the actuals of 1891-92 and 1892-93 amounting to Rs. 9,27,642 and Rs. 9,13,136, respectively. The receipts in the first nine months of 1894-95 showed a great falling off, and the revised estimate was placed at Rs. 7,80,000. The actual receipts amounted, however, to Rs. 8,52,001.

16. *Marine*.—The receipts under this head amounted to Rs. 9,32,653 against Rs. 9,45,000, the revised estimate passed by the Government of India. The decrease was chiefly under pilotage receipts.

17. *Scientific and other Minor Departments*.—The receipts from Cinchona Plantations amounted to Rs. 1,41,785 against Rs. 1,23,000, the revised estimate for the year, and owing to this increase the total receipts under Minor Departments amounted to Rs. 2,04,045 against Rs. 1,85,000, the revised estimate passed by the Government of India.

18. *Stationery and Printing*.—The receipts under this head amounted to Rs. 1,30,510 against Rs. 1,22,000, the revised estimate passed by the Government of India.

19. *Miscellaneous*.—The total receipts under this head amounted to Rs. 10,12,073 against Rs. 9,35,000, the revised estimate passed by the Government of India. The increase was wholly under "Unclaimed deposits," the approximate actuals of which amounted to Rs. 4,38,456, against Rs. 3,60,000 provided for in the revised estimate.

20. *Railways*.—The following statement compares the budget and revised estimates as passed by the Government of India with the actuals of the year:—

		Budget estimate. Rs.	Revised estimate. Rs.	Actuals. Rs.
Gross receipts	...	1,22,00,000	1,43,00,000	1,43,86,293
Working expenses	...	55,00,000	57,00,000	57,21,845
Net receipts	...	67,00,000	86,00,000	86,64,448
Provincial share	...	33,50,000	43,00,000	43,32,224

21. *Irrigation Major Works*.—The total receipts amounted to Rs. 15,24,040 against Rs. 14,60,000, the revised estimate, and Rs. 15,00,000, the budget estimate, for the year, as shown below:—

		Budget estimate. Rs.	Revised estimate. Rs.	Actuals. Rs.
Orissa Project	...	3,40,000	3,19,000	3,33,072
Midnapore Canal	...	2,70,000	2,52,000	2,94,682
Tidal Canal	...	55,000	65,000	58,525
Sone Project	...	8,35,000	8,24,000	8,37,761
Total	...	15,00,000	14,60,000	15,24,040

The actuals were Rs. 64,040 in excess of the revised estimate, owing to the recovery of outstanding balances and better toll receipts from the Midnapore Canal.

22. *Minor Works by Civil Department*.—The recoveries on account of zamindari embankments under the contract system amounted to Rs. 80,638, against Rs. 1,03,000 provided for in the revised estimate of the year, and the total collections under this head aggregated to Rs. 1,81,347 against Rs. 2,03,000, the revised estimate passed by the Government of India. The falling off was due to the non-realization of the full demand of the year in three districts.

23. *Buildings and Roads—Civil Works by Public Works Department*.—The total receipts amounted to Rs. 2,35,308, against Rs. 2,45,000 entered in the revised estimate. The difference was due to the fact that the distillery building at Manicktolla, from the sale of which Rs. 40,000 were expected to be realized, could not be sold during the year, while, on the other hand, a sum of Rs. 34,817 was credited in the accounts as the profits from the Calcutta Work-shops.

24. *Summary of Receipts.*—The total Provincial receipts of the year, exclusive of the opening balance, amounted to Rs. 4,46,19,722, against Rs. 4,42,97,000 passed by the Government of India as the revised estimate, showing an increase of Rs. 3,22,722. Of this increase, Rs. 71,530 was under Land Revenue, Rs. 72,001 under Jails, Rs. 77,073 under Miscellaneous, and Rs. 64,040 under Irrigation Major Works.

## EXPENDITURE.

25. *Refunds and Drawbacks.*—The total Provincial expenditure under this head amounted to Rs. 1,64,780 against Rs. 1,51,000, the revised estimate passed by the Government of India. The increase was chiefly under "Stamps."

26. *Salt.*—The original estimate under this head, amounting to Rs. 33,000, was raised to Rs. 40,000 in the revised estimate, owing to the hiring of two sheds at the Kidderpore Docks for the storage of the unusually large importation of salt and for the temporary establishment entertained in connection therewith, and also for the erection of a kutchha shed and mat walls in the Sulkea Golah in order to increase the space for the storage of salt. The actual charges, however, amounted to Rs. 52,220 owing to the adjustment under this head of Rs. 11,106, being the cost of the deputation of Mr. F. Ashton, Assistant Commissioner, Northern India Salt Revenue Department, to enquire into the extent of illicit manufacture of salt on the sea-coast of Bengal.

27. *Stamps.*—The total charges of the Stamp Department amounted to Rs. 6,51,197 against Rs. 6,73,000, the revised estimate for the year. The Provincial share of the total charges was Rs. 4,88,398.

28. *Customs.*—The latest actuals reported by the Accountant-General amounted to Rs. 6,46,749 against Rs. 7,75,000, the revised estimate. The total charges for the additional establishment entertained in the Calcutta Custom House, consequent on the introduction of the new Tariff Act, amounted to Rs. 68,060, and a credit for this amount has been taken under Land Revenue as an assignment from the Imperial revenues to meet the additional charge.

29. *Law and Justice—Courts of Law.*—The total charges amounted to Rs. 89,09,460 against Rs. 88,95,000, the revised estimate. The increase was chiefly due to the payments on account of exchange compensation allowance, which amounted to Rs. 3,02,000, against Rs. 2,86,000 provided for in the revised estimate.

30. *Jails.*—There was exceptionally small outlay on purchase of raw materials, and the total charges amounted to Rs. 20,07,529 against Rs. 20,50,000, the revised estimate for the year.

31. *Police.*—The total charges amounted to Rs. 59,04,831 against Rs. 59,12,000, the revised estimate for the year. The details are:—

	Revised estimate.	Approximate actuals.
	Rs.	Rs.
Presidency Police ...	7,50,000	7,39,735
Superintendence ...	1,70,000	1,74,138
District Executive Force ...	42,75,000	43,10,879
Municipal Police (Howrah Police) ...	37,000	35,840
Village " ...	30,000	28,773
Special " ...	5,35,000	4,94,085
Railway " ...	1,06,000	1,15,871
Cattle-pounds ...	6,000	5,038
Refunds ...	3,000	472
Total ...	59,12,000	59,04,831

The saving under "Special Police" was in the charges for rations for the Lushai Civil Police.

32. *Marine.*—The total expenditure under this head amounted to Rs. 8,93,080 against Rs. 8,81,000, the revised estimate accepted by the Government of India. The increase was partly under "Pilotage and pilot establishment," and partly under "Miscellaneous."



33. *Education*.—There has been an increase of expenditure under "Government Colleges, Professional," owing to increased charges for materials and tools, and the total charges amounted to Rs. 26,37,605 against Rs. 26,10,000, the revised estimate for the year.

34. *Medical*.—The expenditure under "Hospitals and Dispensaries" amounted to Rs. 4,40,816, against Rs. 4,27,000 provided for in the revised estimate, and the total charges of the Department amounted to Rs. 18,13,084 against Rs. 17,90,000, the revised estimate for the year. The increase occurred chiefly in the expenditure on the Campbell Hospital.

35. *Stationery and Printing*.—The cost of stationery supplied from Central Stores in 1894-95 amounted to Rs. 4,99,861, against Rs. 7,70,000 provided in the budget, and the total expenditure to Rs. 11,20,623 against Rs. 14,14,000, the revised estimate passed by the Government of India. The reduction in expenditure under Stationery was due to the steps taken by Government to prevent the introduction of new forms, unless when absolutely required, and to the substitution of country-made for imported articles.

36. *Miscellaneous*.—There was less expenditure under "Donations for charitable purposes" and "Rents, Rates and Taxes" than that provided for in the revised estimate, and the total charges amounted to Rs. 2,29,066 against Rs. 2,45,000, the revised estimate passed by the Government of India.

37. *Irrigation Major Works*.—The working expenses aggregated Rs. 13,72,972, against Rs. 14,67,000 provided in the revised estimate. The short outlay was due to over-estimation of the charges.

38. *Irrigation Minor Works*.—The actual outlay amounted to Rs. 14,57,828, or Rs. 92,172 less than the revised estimate. There were savings on all classes of works with the exception of those for which only revenue accounts are kept. The savings were principally under (1) charges for establishment, (2) in agricultural works, and (3) in the reduction of suspense balances.

39. *Buildings and Roads—Civil Works by Public Works Department*.—The expenditure during the year amounted to Rs. 24,90,918 against Rs. 24,44,000, the revised estimate passed by the Government of India. The revised estimate has thus been exceeded by Rs. 46,918, due principally to the increase in the suspense balances of the Calcutta Workshops.

40. *Summary of Expenditure*.—The total expenditure amounted to Rs. 4,29,20,640, against a revised estimate of Rs. 4,35,48,000, the reduction being Rs. 6,27,360. The expenditure was less than the receipts of the year by 17 lakhs.

41. *Closing balance*.—According to the approximate actuals now received, the closing balance stood at Rs. 43,23,120, against Rs. 33,73,000 anticipated by the Government of India when passing the estimate for the current year. The province is better than the revised estimate by about nine and-a-half lakhs. This unusually large difference between the revised estimate and the approximate actuals of the year is due on the Receipt side to an under-estimate of the collections from Land Revenue, to an unexpected increase in the sale-proceeds of Jail manufactures, to a windfall in the form of a rise of unclaimed deposits under Miscellaneous, and to the realization of arrear balances and increased toll receipts under Irrigation Major Works. Under Expenditure, improved administration of the Stationery Department resulted in a reduction of nearly three lakhs; a lakh and-a-quarter estimated for increased Customs establishment was not sanctioned within the year; the jails made smaller purchases of raw material, and the balance occurred under the head of Irrigation.

### PART III.

#### BUDGET ESTIMATE, 1895-96.

42. THE Lieutenant-Governor has already in separate Resolutions reviewed the estimates of receipts and charges for the current year. Later information, however, has led to a modification of these in some respects. The following

table shows the estimates as passed by the Government of India and the estimates which the Lieutenant-Governor has finally resolved to adopt:—

RECEIPTS.	Budget estimate.	Revised estimate now adopted.	EXPENDITURE.	Budget estimate.	Revised estimate now adopted.
1	2	3	4	5	6
Opening balance ...	Rs. 33,73,000	Rs. 43,33,000	Direct demand on the Revenues—	Rs.	Rs.
Principal Heads of Revenue—			1. Refunds and Drawbacks ...	1,52,000	1,52,000
I.—Land Revenue (Proper)	1,00,33,000	1,00,33,000	2. Assignments and Compensations ...	1,72,000	1,72,000
... (Adjustments) ...	—9,33,000	—10,33,000	3. Land Revenue ...	30,88,000	37,00,000
III.—Salt ...	93,000	1,30,000	4. Salt ...	36,000	36,000
IV.—Stamps ...	1,25,25,000	1,27,50,000	5. Stamp ...	5,22,000	5,22,000
V.—Excise ...	31,75,000	32,25,000	6. Excise ...	1,06,000	1,06,000
VI.—Provincial Rates ...	42,81,000	43,30,000	7. Provincial Rates ...	85,000	85,000
VII.—Customs ...	61,000	75,000	8. Customs ...	8,25,000	8,20,000
VIII.—Assessed Taxes ...	22,50,000	22,50,000	9. Assessed Taxes ...	85,000	85,000
IX.—Forests ...	4,05,000	4,05,000	10. Forests ...	2,30,000	2,30,000
X.—Registration ...	7,00,000	7,00,000	11. Registration ...	4,12,000	4,12,000
Total ...	3,25,53,000	3,28,20,000	Total ...	64,13,000	63,90,000
XII.—Interest ...	2,34,000	2,36,800	12. Interest on ordinary debt ...	2,18,000	2,18,000
Post Office, Telegraph and Mint—			Post-office, Telegraph and Mint—		
XIII.—Post-office ...	5,000	5,000	13. Post-office ...	10,000	10,000
Receipts by Civil Department—			Salaries and expenses of Civil Department—		
XVI.—Law and Justice—			14. General Administration ...	17,08,000	17,40,000
Courts of Law ...	8,00,000	8,60,000	15. Law and Justice { Courts of Law	90,32,000	90,32,000
Jails ...	8,70,000	8,70,000	{ Jails ...	21,47,000	21,47,000
XVII.—Police ...	2,43,000	2,28,000	16. Police ...	60,18,000	60,38,000
XVIII.—Marine ...	9,40,000	9,40,000	17. Marine ...	8,91,000	8,91,000
XIX.—Education ...	5,70,000	5,70,000	18. Education ...	28,72,000	28,70,000
XX.—Medical ...	2,00,000	2,08,000	19. Medical ...	18,19,000	18,40,000
XXI.—Scientific and other Minor Departments ...	1,89,000	2,10,000	20. Political ...	20,000	20,000
Total ...	30,12,000	38,50,000	21. Scientific and other Minor Departments ...	4,61,000	4,70,000
Miscellaneous—			Total ...	2,47,74,000	2,48,58,000
XXII.—Receipts in aid of Superannuation ...	68,000	76,000	Miscellaneous—		
XXIII.—Stationery and Printing ...	1,27,000	1,27,000	22. Superannuation, &c. ...	18,05,000	18,40,000
XXIV.—Miscellaneous ...	8,62,000	8,62,000	23. Stationery and Printing ...	13,14,000	13,21,000
Total ...	10,57,000	10,65,000	24. Miscellaneous ...	2,44,000	2,47,000
Railways—			Total ...	33,65,000	34,08,000
XXVI.—State Railways (net receipts)	36,50,000	39,75,000	Irrigation—		
Irrigation—			25. Major Works—		
XXVII.—Major Works (direct receipts)	15,00,000	15,00,000	Working expenses ...	14,90,000	14,90,000
XXVIII.—Minor Works and Navigation—			Interest on debt ...	24,08,000	24,08,000
By Public Works Department ...	7,25,000	7,25,000	26. Minor Works and Navigation—		
„ Civil Department ...	1,61,000	1,61,000	By Public Works Department ...	18,82,000	17,61,000
Total ...	23,86,000	23,86,000	„ Civil Department ...	5,000	5,000
Buildings and Roads—			Total ...	33,85,000	37,14,000
XXIX.—Civil Works—			Buildings and Roads—		
By Public Works Department ...	1,60,000	2,45,000	27. Civil Works—		
„ Civil Department ...	2,38,000	2,38,000	By Public Works Department ...	26,98,000	31,86,000
Total ...	4,18,000	4,83,000	„ Civil Department ...	1,36,000	1,40,000
Total ...	4,41,97,000	4,48,50,000	Total ...	28,32,000	33,76,000
GRAND TOTAL ...	4,76,70,000	4,91,78,000	Contributions ...	11,11,000	11,42,000
			Total ...	4,43,09,000	4,80,16,000
			Closing balance ...	32,62,000	41,08,500
			GRAND TOTAL ...	4,76,70,000	4,91,70,000
			Provincial deficit (—) ...	—1,11,000	—1,60,000

RECEIPTS.

43. Land Revenue.—	The total collections in 1894-95 amounted to Rs. 3,89,10,164, and the estimate for 1895-96 has been passed by the Government of India for Rs. 3,88,50,000, which includes Rs. 1,50,000 for recoveries on account of survey charges. The average receipts during the past five years have been Rs. 3,87,24,000. The collections during the first five months of the current year amounted to Rs. 69,49,000, against Rs. 72,97,000 obtained in the corresponding period of last year, showing a decrease of Rs. 3,48,000. Looking to the prospects of the season, it is very doubtful whether the total receipts will come up to the amount collected last year, but at present there is no reason to anticipate that the estimate passed by the Government of
1890-91 ...	Rs. 3,88,19,000
1891-92 ...	3,86,80,000
1892-93 ...	3,84,96,000
1893-94 ...	3,87,14,000
1894-95 ...	3,89,10,000
Total for five years ...	19,36,19,000
Average per year ...	3,87,24,000

in the corresponding period of last year, showing a decrease of Rs. 3,48,000. Looking to the prospects of the season, it is very doubtful whether the total receipts will come up to the amount collected last year, but at present there is no reason to anticipate that the estimate passed by the Government of



India for the current year will not be reached, and it will accordingly be retained. The Provincial share will then stand at Rs. 1,00,33,000. The adjustments between Imperial and Provincial will probably result in a net transfer of Rs. 10,38,000 to Imperial, as shown below :—

	Budget estimate.	Revised estimate now adopted.
From Imperial to Provincial—		
(a) Grant for the Hijili Canal ...	Rs. 1,65,000	Rs. 1,65,000
(b) Grant for transfer of Imperial Buildings under Local ...	10,000	19,000
(c) Assignment for Gnatong Police ...	16,000	16,000
(d) Grant for loss sustained consequent on the reservation of the Western Duars of Jalpaiguri for the future operations of the Khedda Department ...	18,000	.....
(e) Grant to meet the cost of additional Cus- toms establishment ...	2,64,000	2,32,000
	<u>4,73,000</u>	<u>4,32,000</u>
From Provincial to Imperial -		
(f) Lump contribution under the contract ...	14,39,000	14,39,000
(g) Interest on advances for the Hijili Canal ...	26,000	26,000
(h) Contribution towards the cost of a tower clock to be set up at the General Post Office ...	.....	5,000
	<u>14,65,000</u>	<u>14,70,000</u>
Net transfers from Provincial to Imperial	<u>9,92,000</u>	<u>10,38,000</u>

(b) The Government of India, while passing orders on the budget estimates for 1895-96, allowed a credit of Rs. 10,385, or Rs. 10,000 in round numbers, on account of the transfer of certain Imperial Civil and Military works which have been permanently transferred to the management of local agencies. Since then the construction, maintenance and repairs of several other Imperial buildings have been entrusted to local bodies with an aggregate grant of Rs. 8,653. The total grant on this account therefore now stands at Rs. 19,038, or Rs. 19,000 in round numbers. (c) The Government of India, in the Foreign Department letter No. 1332E., dated the 8th July 1895, have already sanctioned an assignment of Rs. 15,650 to meet charges connected with the maintenance of the Military Police force required to garrison Gnatong in 1895-96. The credit for Rs. 16,000 in round numbers has been retained. (d) The Government of India, in the Military Department letter No. 3577D., dated the 24th July 1895, have sanctioned the retransfer of the Western Duars to the Civil Department from the 1st April 1895, so that the Khedda Department will be relieved of the annual compensation of Rs. 17,971, and this item will no longer appear in the Provincial accounts. (e) As explained in paragraph 60 below, a saving of Rs. 35,000 is anticipated under Customs, while an increase of Rs. 2,718 has been estimated under Customs Audit Department of the Board's office. The net saving may therefore be Rs. 32,000. A reduction of this amount will be made in the estimated assignment for Customs establishment. (h) The Lieutenant-Governor has promised a grant of half the cost of a clock to be set up on the General Post Office in Calcutta not exceeding Rs. 5,000, and a debit of this amount has accordingly been made against the Provincial share of Land Revenue.

44. *Salt*.—The provincial receipts under this head amounted to Rs. 84,536 in 1892-93 and Rs. 77,373 in 1893-94. The actuals in 1894-95 were Rs. 1,41,291, and were swollen by an unusually large importation of salt in the latter part of the year. The actual collections in the first five months of the current year amounted to Rs. 73,326, against Rs. 44,367 in the corresponding period of 1894-95 and Rs. 31,510 in 1893-94. The estimate for 1895-96 is Rs. 95,000; but in view of the actual realizations in the current year, the estimate will be raised to Rs. 1,20,000.

45. *Stamps*.—The total revenue for stamps has been estimated at Rs. 1,67,00,000. The Comptroller-General's latest statement shows that the

receipts during the first five months of the current year amounted to Rs. 77,08,000, against Rs. 74,22,000 obtained in the corresponding period of last year, showing an increase of Rs. 2,86,000. The actual receipts in 1894-95 amounted to Rs. 1,67,01,147, and the Lieutenant-Governor thinks that the estimate of 1895-96 may be safely raised to Rs. 1,70,00,000. The Provincial share will be Rs. 1,27,50,000.

46. *Excise.*—The estimate of total revenue under this head has been estimated at Rs. 1,27,00,000, being Rs. 1,38,000 more than the approximate actuals of 1894-95, which amounted to Rs. 1,25,62,000. The Comptroller-General's latest statement shows that the receipts during the first five months of 1895-96 have exceeded those of the corresponding period of last year by Rs. 4,31,000, and the results of the recent settlement of excise shops for the current year show an increase of Rs. 3,95,403 in license fees as compared with those of last year. In view of these figures, the estimate may be safely placed at Rs. 1,29,00,000. The Provincial share will stand at Rs. 32,25,000.

47. *Provincial Rates.*—The following statement compares the receipts under this head for three years:—

	Actuals, 1892-93.	Actuals, 1893-94.	Approximate actuals, 1894-95.	Budget estimate, 1895-96.	Revised estimate now adopted.
	Rs.	Rs.	Rs.	Rs.	Rs.
Public works cess	41,95,253	41,34,309	41,78,695	41,46,000	41,65,000
Proportionate cost of collecting road cess	3,44,125	3,47,201	3,268	1,85,000	1,35,000
General management of private estates	76,889	1,31,551	1,27,187	—	—
Total	46,16,267	46,13,061	43,08,150	42,51,000	43,00,000

The collections of the Public works cess in the first five months of the current year show a small decrease of nearly Rs. 9,000, but, looking to the actuals of 1894-95, there is no reason to anticipate that the collections at the end of the year will fall far short of last year. The total estimate under this head will be placed at Rs. 43,00,000.

48. *Customs.*—The Provincial receipts during the first five months of the current year amounted to Rs. 34,413, against Rs. 24,461 in the corresponding period of last year, showing an increase of Rs. 9,952. The total receipts in 1894-95 were Rs. 73,380, and the estimate for 1895-96 will be raised from Rs. 61,000 to Rs. 75,000.

49. *Assessed Taxes.*—Both the estimate for 1895-96 and the revised estimate for 1894-95 were passed by the Government of India for Rs. 45,00,000. The actual collections in last year amounted, however, to Rs. 45,63,242, and the arrear balance was reduced from Rs. 2,66,987 to Rs. 1,62,002. The collections during the first five months of the current year show an increase of Rs. 50,000, as compared with those of the corresponding period of last year. The estimate passed by the Government of India will be retained for the present.

50. *Law and Justice—Courts of Law.*—The total receipts under this head in the first five months of the current year show a decrease of Rs. 9,000 as compared with those of the corresponding period of last year. The approximate actuals in 1894-95 amounted Rs. 8,72,830, and the estimate for the current year will be reduced from Rs. 8,90,000 to Rs. 8,60,000.

51. *Police.*—The receipts during the first five months of the current year show a decrease of nearly Rs. 8,000 as compared with those of the corresponding period of last year. The latest actuals of 1894-95 were Rs. 2,36,645, and the estimate for 1895-96 will be reduced from Rs. 2,43,000 to Rs. 2,28,000.

52. *Medical.*—The total receipts amounted to Rs. 1,90,572 in 1893-94 and Rs. 2,05,158 in 1894-95. The receipts in the first five months of the current year show an increase of Rs. 5,000 over those of the corresponding period of last year. The estimate will be raised from Rs. 2,00,000 to Rs. 2,08,000.

53. *Scientific and other Minor Departments.*—The receipts under this head in 1894-95 amounted Rs. 2,04,045, and in the first five months of the current year show an increase of about Rs. 16,000 over those of the corresponding period of last year. The estimate will be raised from Rs. 1,99,000 to Rs. 2,10,000.

54. *Superannuations.*—The approximate actuals under this head for 1894-95 were Rs. 75,639, and the receipts in the first five months of the current year

show a small increase of about Rs. 2,000 over those obtained in the same period of last year. The estimate will be raised from Rs. 68,000 to Rs. 76,000.

55. *Railways*.—The following statement compares the estimates for 1895-96 with the actuals of the past two years:—

	Actuals, 1893-94.	Actuals, 1894-95.	Estimate, 1895-96.	Estimate, now adopted.
	Rs.	Rs.	Rs.	Rs.
Gross receipts ...	1,24,94,814	1,43,86,293	1,30,00,000	1,36,00,000
Working expenses ...	54,25,131	57,21,845	57,00,000	56,50,000
Net receipts ...	70,69,683	86,64,448	73,00,000	79,50,000
Provincial share	35,34,841	43,32,224	36,50,000	39,75,000

The approximate gross earnings of the Eastern Bengal State Railway system from the 1st April to 28th September 1895 amounted to Rs. 62,37,799, against Rs. 61,97,159 obtained from 1st April to 29th September 1894. If the average receipts of one day are added to this, the total increase in five months and 29 days will be about Rs. 91,000. The large receipts in 1894-95 were attributed to a favourable jute traffic, but as the earnings in the first six months of the current year show an increase over those of the corresponding period of the preceding year, the Lieutenant-Governor is of opinion that the estimate may fairly be placed at Rs. 1,36,00,000. This figure has been taken provisionally. The Provincial share of these receipts will stand at Rs. 39,75,000.

56. *Irrigation—Major Works*.—The Government of India placed the revised estimate for 1894-95 under this head at Rs. 14,60,000, and the estimate for the current year at Rs. 15,00,000. The returns of the Examiner of Public Works Accounts show that the receipts in first four months of the current year were Rs. 62,000 less than those of the corresponding period of last year. There has been a slight increase under Navigation and Miscellaneous, but a very marked falling off in water-rates. These are, however, expected to be made up later on in the year. The receipts in 1894-95 will have amounted to Rs. 15,24,040, and the average actuals of the past five years were Rs. 16,07,000. In view of the fluctuating character of these receipts, it will

not perhaps be safe to anticipate that the average of the past five years will be obtained, but there is no reason to think that Rs. 15,00,000, the estimate passed by the Government of India, will not be attained.

57. *Civil Works by Public Works Department*.—The estimated receipts, amounting to Rs. 1,80,000, will be raised by Rs. 30,000, being the estimated sale-proceeds of the Maniktollah distillery buildings, and by Rs. 35,000, being the estimated profits of the Sibpur Workshops. The total estimate will stand at Rs. 2,45,000.

58. *Summary of Receipts*.—The total receipts of the province, which when the budget estimate was framed were placed at Rs. 4,41,97,000, will now stand in the revised estimate at Rs. 4,48,56,000, exclusive of the opening balance, an increase of 6½ lakhs.

#### EXPENDITURE.

59. *Land Revenue*.—The estimate under this head, amounting to Rs. 36,88,000, will be raised by Rs. 2,965 for the construction of a boat for the Collector of Cuttack; by Rs. 500 for the construction of a well in the compound of Collector's cutcherry, Monghyr; by Rs. 3,067 for enquiry into the mul-raiyati rights in the Deoghur subdivision in Sonthal Parganae; and by about Rs. 4,000 for temporary establishment for the completion of audit work of the

tauzi accounts of the Cuttack Collectorate and for rewriting tauzi rolls in the Muzaffarpur Collectorate and writing up the tauzi rolls and ledgers in the Saran Collectorate. The total grant will now stand at Rs 37,00,000.

60. *Customs.*—The total expenditure for the year 1895-96 was originally estimated by the Accountant-General at Rs. 5,86,000 against Rs. 5,79,000, the budget estimate for 1894-95. The estimate of the Accountant-General did not include any provision for the additional establishment, the necessity for which had arisen in consequence of the passing of Act XVI of 1894, nor had he provided for the additional establishment provisionally entertained upon the passing of Act VIII of 1894. The Accountant General's estimate of Rs. 4,80,514 for the Calcutta Custom House establishment was raised to Rs. 7,44,000, and the total grant was passed for Rs. 8,55,000, including an extra provision of Rs. 5,000 for exchange compensation allowance. The figure finally passed by the Government of India for the Custom House establishment amounts to Rs.  $58,627-1-4 \times 12 =$  Rs. 7,03,525, and for the Custom Audit Department of the Board's office Rs.  $327-8 \times 12 =$  Rs. 3,930. A saving of Rs. 7,44,000—Rs. 7,04,000 = Rs. 40,000 may therefore be expected under Custom House establishment, but some additional provision is necessary for contingencies and travelling allowances, &c., owing to the increase of establishment. A reduction of Rs. 35,000 will therefore be made under Customs, and the total grant will now stand at Rs. 8,20,000.

61. *General Administration.*—As stated above, a provision of Rs. 3,930 will be necessary for the Customs Audit Department of the office of the Board of Revenue, against Rs. 2,112 already included in the budget. An additional provision of Rs. 1,818, or Rs. 2,000 in round numbers, will be made on this account. The total charges in 1894-95 amounted, however, to Rs. 17,19,693, and the actuals of the first five months of the current year show an increase of Rs. 25,000 as compared with those of the corresponding period of last year. In view of these figures, the total grant will be raised from Rs. 17,08,000 to Rs. 17,40,000.

62. *Jails.*—The estimate under this head will be reduced by Rs. 929, which has been made over to the Public Works Department for effecting certain improvements in the drainage of the Presidency Jail. Against this reduction, some provision is necessary for the employment of female warders for female prisoners in certain jails sanctioned in August last at an additional monthly cost of Rs. 92. On the whole the grant will stand at Rs. 21,47,000, as originally sanctioned by the Government of India.

63. *Police.*—The estimate under this head has been raised by Rs. 18,000, to provide for the following charges sanctioned after the budget was passed:—

- (1) The payment of Rs. 3,391-10-8 to the East Indian Railway Company on account of supervision charges of the Government Railway Police over the State lines in the Bengal Division of the East Indian Railway from the 1st October 1885 to the 31st March 1892.
- (2) The payment of the sums of Rs. 2,798-0-8 and Rs. 1,293-15-5 on account of the  $\frac{1}{10}$ ths share due for the cost of watch and ward establishment and police guards employed in Bengal by the Bengal and North-Western Railway Company from the 1st April 1884 to the 30th June 1890.
- (3) The payment of Rs. 1,416-13-2 on account of the  $\frac{1}{10}$ ths share payable by this Government of the cost of house accommodation provided by the Bengal and North-Western Railway Company for the police force employed in the Bengal section of the Bengal and North-Western and Tirhut Railways.
- (4) The payment of Rs. 1,500 for Dome settlements in the Champaran district.
- (5) Additional provision necessary for the Government share of River Police, Rs. 1,367.
- (6) The appointment of an Inspector on Rs. 100 per mensem for the district of Saran to supervise the Dome settlements, Rs. 900.

The total grant will now stand at Rs. 60,36,000.

64. *Education.*—The estimate under this head, amounting to Rs. 26,72,000, has been reduced by Rs. 24,207 on account of the following charges transferred



to the Public Works Department and to District Boards on account of the following buildings:—

	Rs.
(a) Additions to and alterations in the Arrah Zilla School building	5,625
(b) Additional accommodation in the Boarding-house of the Government School at Baraset	3,148
(c) Construction of two wings and a gallery in the Chapra Zilla School	13,385
(d) Conversion of the south part of the compound of the Patna College into a cricket-ground	1,412
(e) Additional expenditure incurred in constructing two wings to the Pabna Zilla School building	283
(f) Raising the floor of the library-room in the Mymensingh School	354

Against these reductions, an additional grant of Rs. 11,055 has been made for primary schools in backward districts, and a provision of Rs. 12,000 for fitting up the chemical and physical laboratories and other changes in the Civil Engineering College, Sibpur. The Secretary of State has sanctioned an honorarium of Rs. 5,000 to Dr. Grunwedel for the completion of the Lepcha Grammar. The total grant will now stand at Rs. 26,76,000.

65. *Medical*.—An additional grant of Rs. 5,000 has been sanctioned for the purchase of certain articles for the Anatomical Museum, Medical College, Calcutta. The charges under "Hospitals and dispensaries" and "Sanitation and Vaccination" during the first five months of the current year show increases of nearly Rs. 10,000 and over Rs. 5,000, respectively, over those of the corresponding period of last year. In view of these increases, the total grant for the year will be placed at Rs. 18,40,000 against Rs. 18,13,084, the latest actuals of 1894-95.

66. *Scientific and other Minor Departments*.—The estimate under this head has been raised by Rs. 2,000 for a grant to the Secretary to the Buddhist Society for the publication of their text, and by Rs. 7,000 to meet other miscellaneous charges, such as special expenditure in connection with the casts of the Asoka inscriptions, charges for Inspector of Explosives, and Refunds. The total grant will now be raised to Rs. 4,70,000.

67. *Superannuation*.—The estimate under this head amounts to Rs. 18,05,000. The actual charges in past years were:—

	Rs.	Increase. Rs.	Rs.
1890-91	15,13,000		
1891-92	16,00,000	87,000	
1892-93	17,08,000	1,03,000	
1893-94	17,40,000	37,000	
1894-95	17,80,000	40,000	
Estimate, 1895-96	18,05,000	25,000	2,67,000

The increase in the last four years amounted to Rs. 2,67,000, or an average of Rs. 67,000 a year. The actuals in the first five months of the current year show an increase of Rs. 35,000 over those of the corresponding period of last year, and justify the estimate being raised to Rs. 18,40,000.

68. *Stationery and Printing*.—An additional grant of Rs. 4,540 has been sanctioned under the head "Contingencies" for municipal taxes on premises No. 3, Church Lane, and 11, Strand. The question of the revision of the establishment of the office of the Superintendent of Stationery is now under the consideration of the Board of Revenue, who have been asked to substitute fixed for incremental salaries, and to convert the existing departmental establishment into a graded one; but pending orders on the subject, no provision is necessary. The total grant under this head will now stand at Rs. 13,21,000.

69. *Miscellaneous*.—The estimate under this head will be raised by Rs. 3,000 granted to the Albert Victor Leper Asylum to meet the present liabilities of the Institution in addition to the annual maintenance allowance. The grant will now stand at Rs. 2,47,000.

70. *Irrigation—Minor Works and Navigation*.—The estimate under this head, as passed by the Government of India, amounts to Rs. 16,22,000. At the instance of the Public Works Department, some small grants have been made, aggregating Rs. 840, to the Local Funds by reduction under this head.



Against this reduction, an additional grant of Rs. 1,30,000 will, with the sanction of the Government of India, be made to the Public Works Department for the improvement of the Bhangorkhal, a section of the Eastern Canal system. The total grant will therefore stand at Rs. 17,51,000.

71. *Civil Works in charge of the Public Works Department.*—The grant for Provincial Civil works for the current year was originally fixed at Rs. 26,96,000. It has been reduced to Rs. 25,77,242 as the net result of certain additions to and deductions from the original allotment sanctioned during the past six months. An additional grant of Rs. 3,919 will have to be made for percentage charges for establishment, tools and plant on Imperial works transferred to the management of local funds in 1894-95; and, subject to the sanction of the Government of India, the Lieutenant-Governor has issued orders to take early steps for the completion and execution of some of the urgent works which were kept back at the time the budget was first prepared, when, in consequence of the fluctuating character of the railway receipts, an accurate forecast of the Provincial share of these receipts could not be obtained. The cost of these additional works in the current year will probably amount to Rs. 5,55,208, as shown below, and the Government of India will be moved for early sanction to this excess expenditure:—

	Rs.
Eden Hostel .....	1,10,000
Calcutta Madrasa Boarding-house .....	27,424
Campbell lying-in-ward .....	31,375
Medical College Anatomical block .....	1,00,817
Kurseong Boys' School .....	84,000
Additional block for the Stamp and Stationery Office .....	89,748
Tollygunge Police Barrack .....	11,132
Bhowanipur Hospital .....	62,100
Bhagalpur Training School .....	4,900
Muzaffarpur Record-room .....	3,477
Treble Munsifi at Howrah .....	21,282
Darjeeling Police Barrack .....	7,873
Covered way to connect the nurses' quarters with the Medical College Hospital .....	1,988
Tirihana to Bagdogra road .....	3,092
Jalpaiguri Deputy Commissioner's residence .....	6,000
Total .....	5,55,208

The total grant will now stand at Rs. 31,36,000.

72. *Civil works in charge of Civil Officers.*—The Lieutenant-Governor has promised to make a grant to the Krishnagar Municipality of half the estimated cost of the drainage of the town up to Rs. 10,000. Against this addition a reduction of Rs. 6,229 will be made in the grant for the repairs of building in the South Lushai Hills, that being the amount already placed at the disposal of the District Board of Chittagong for the repairs of the Commissariat godown. The total grant will now stand at Rs. 1,40,000.

73. *Contributions.*—The grants made to the several District Boards to establish equilibrium between the receipts and charges transferred to their management amount to Rs. 4,76,885, and the special grants made to certain local bodies for the maintenance of roads transferred to their charge amount to Rs. 2,11,253. The annual grants to local bodies for the maintenance of Imperial and Provincial civil works, including establishment and allowances to Engineers, &c., amount to Rs. 1,52,649, and the annual grants to District Road Funds and District Road Accounts aggregate Rs. 53,056. The total comes up to Rs. 8,93,843. The following further grants have been sanctioned for the current year:—

	Rs.
(1) To Local Funds for Imperial works .....	8,653
(2) Ditto Provincial works .....	1,78,278
(3) Ditto Irrigation Minor Works .....	840
(4) Ditto Educational works .....	637
(5) To the District Board of Chittagong for repairs to the Commissariat godown .....	6,229
(6) To the Sonthal Parganas Road Account for improvements in Government estates .....	16,000
Total .....	2,10,637

These make a total of Rs. 11,04,480; and as some provision is necessary to meet unforeseen demands, the estimate under this head will be placed at Rs. 11,42,000.

74. *Summary of Expenditure.*—The total expenditure is thus estimated at Rs. 4,50,16,000, against a budget figure of Rs. 4,43,08,000, an increase of seven lakhs of rupees. It exceeds the estimated receipts by one and-a-half lakhs of rupees.

75. *Closing balance.*—According to the estimates passed by the Government of India, it was expected that the year would close with a balance of Rs. 32,62,000. According to the estimates now adopted, the closing balance will be Rs. 41,63,000, against an opening balance of Rs. 43,23,000. The total estimate of expenditure now adopted exceeds, however, the budget estimate by a net sum of Rs. 7,08,000, for which the sanction of the Supreme Government is necessary. This excess is made up of additional grant of Rs. 23,000 under Education, Rs. 1,30,000 under Irrigation—Minor Works, for the Bhangor khal, and Rs. 5,55,000 under Civil Buildings for urgent works which cannot be postponed.

76. *Brief retrospect of five years.*—This is a convenient place in which to record the financial history of the Province during the last five years. That history is contained in the following figures:—

	Actuals.			Approximate actuals, 1894-95.	Revised estimate, 1895-96.
	1891-92.	1892-93.	1893-94.		
1	2	3	4	5	6
Opening balance ... ..	Rs. 24,72,774	Rs. 23,53,431	Rs. 22,55,172	Rs. 26,24,038	Rs. 43,23,000
Receipts ... ..	5,78,01,984	4,24,45,566	4,32,76,825	4,40,19,723	4,48,56,000
Total ... ..	6,02,74,758	4,47,98,997	4,55,32,007	4,72,43,760	4,91,79,000
Expenditure ... ..	5,79,91,337	4,26,43,825	4,29,00,459	4,29,20,640	4,50,16,000
Closing balance ... ..	23,83,431	22,55,172	26,31,548	43,23,120	41,63,000

77. The opening balance of 1891-92 would have been much higher but for the special benevolence of 10 lakhs levied by the Government of India in 1890-91 in addition to the fixed contribution of Rs. 6,90,000 due under the Provincial contract commenced in 1887-88, which expired in April 1892. During 1891-92 the Provincial receipts amounted to Rs. 5,78,01,984, and the expenditure of the year slightly exceeded the receipts, and the closing balance was reduced to Rs. 23,53,431, or about three and-a-half lakhs above the prescribed minimum. The next year, 1892-93, was the first of the current contract framed for the five years April 1892 to March 1897. As compared with the receipts of 1891-92, the Provincial revenues of 1892-93 show a falling off of rather more than a crore and-a-half. Of this decline no less than 129 lakhs is accounted for by an important administrative change, carried out with Sir Charles Elliott's entire concurrence, under which the Nalhati and Tirhut State Railways were made Imperial, while the net receipts of the Eastern Bengal Railway system were divided equally between Imperial and Provincial revenues. At the same time it was decided that the executive control of all these railways should rest with the Government of India. There was also a fall of more than 27 lakhs under Land Revenue adjustments, caused by the rise in the fixed contribution from Provincial to Imperial to Rs. 14,39,000, and by the fact that certain large contributions made from Imperial revenues on account of special expenditure during 1891-92 did not recur in 1892-93. On the expenditure side, Bengal was relieved of charges amounting to 142 lakhs under the head of State Railways, including nearly 37 lakhs for interest on debt, while the cost of the survey and settlement operations was made Imperial. The result of these adjustments was that in the first year of the contract, the Province had a revenue of Rs. 4,24,45,566 against an expenditure of Rs. 4,25,43,825, and the balance at the close of the year was reduced to Rs. 22,55,172. In the following year, 1893-94, the revenue shows an increase of Rs. 8,32,759, owing to increased receipts under Stamps and Excise, and an improvement of over four lakhs under Railways, due to the increased prosperity of the Eastern Bengal State Railway. On the Expenditure side the charges increased by Rs. 3,65,634, owing mainly to the grant of exchange compensation allowance. The revenue, however, exceeded the expenditure by Rs. 3,68,866, and the year closed with a balance of Rs. 26,24,038. The revenue of 1894-95 increased

by nearly seventeen lakhs, of which nearly eight lakhs occurred under Railways, nearly five and-a-half lakhs under Stamps, and a lakh and-a-half under Miscellaneous, while Excise and Assessed Taxes show an increase of more than a lakh each. As, however, an extraordinary contribution of three lakhs was levied by the Government of India, and adjusted under Land Revenue, the actual rise in the Provincial revenues was only thirteen and-a-half lakhs. No material increase occurred in the expenditure, and the balance at the close of the year stood at Rs. 43,23,120. The figures now adopted for the current year show increases of two lakhs and-a-quarter under Stamps, three-quarters of a lakh under Excise, and five lakhs under Land Revenue Adjustments; while the estimated receipts from Railways have declined by three lakhs and-a-half, and from Miscellaneous by one lakh and-a-half, the net result being an increase of two lakhs and-a-half. On the other hand, the expenditure as now estimated has risen by nearly twenty-one lakhs distributed over a number of heads, the largest increase being under Irrigation and Roads and Buildings, which between them account for nearly half of the amount.

78. On a review of the entire period, it will be seen that, besides the extraordinary benevolence of ten lakhs levied at the commencement of the period, Bengal has contributed within the last five years no less than Rs. 67,46,000 to meet the necessities of the Empire, over and above the heads of receipts ordinarily classed as Imperial: and in addition to this there has been a steady growth in the receipts divided in varying proportions between Imperial and Provincial Revenues, which, while it swelled the Provincial revenues in the manner described above, yielded to the Supreme Government an increase of nearly fifty-one lakhs. Notwithstanding this drain upon the Provincial resources, the Lieutenant-Governor is glad to be able to look back upon a substantial array of administrative improvements which have been carried out within the period under review. Three new districts have been created, the number of Subordinate Judges and Munsifs has been increased, an additional Judge has been appointed for the Eastern districts, the ministerial establishments of Judicial officers have been strengthened, and the number of Rural Sub-Registrars has been increased. The police has been reorganised mainly on the lines suggested by the Police Commission of 1890, at a total cost of more than five lakhs per annum; a school for the training of Police officers has been opened; barracks have been built and improved; special reserves of armed police have been created in every district to meet local emergencies; and the French system of identifying criminals by measurement has been introduced. The jails at Buxar and Bhagalpur have been enlarged; the Hazaribagh jail has been converted into a central jail; special committees have been formed for the purpose of conducting systematic inquiries into the condition of the less healthy jails; and the water-supply of all the jails has been examined and improved. A large block of buildings to be devoted to the study of anatomy has been added to the Medical College, and numerous minor improvements have been made in the buildings of that institution; surgical and midwifery wards and a dispensary have been constructed at the Campbell Hospital; a new hospital is under construction in the south of Calcutta; the Vaccination and Sanitary Department have been completely reorganized; a second vaccine depôt has been opened at Darjeeling, and is now extending its operations to Nepal; quinine has been brought through the Post Office within the reach of the poorest classes, and the supply has been increased by the purchase of a fresh plantation at Nimbong near Darjeeling. The system of weighing salt has been improved, and the salt warehouse at Sulkea has been connected with the East Indian Railway so as to facilitate the export of salt by rail. Under the head of Public Works the period has been one of considerable activity. In Calcutta a new Police Court, an office for the Presidency Commissioner, the Collector of Calcutta, and the Collector of Income-tax, and two new buildings for the Stamps and Stationery Department, have been built, a fresh wing has been added to the Indian Museum, and the Small Cause Court has been greatly enlarged. In the mufassal a large number of Government offices have been built and extended, and quarters have been provided for officials in several places where houses were not to be had. Feeder roads have been opened in connexion with several railways, and a definite scheme has been worked out for future operations in this direction. Material help has been afforded to the backward districts of Palamau and the Sonthal Parganas towards new and improved roads; the communications of the tea districts of the Duars and of Darjeeling have been improved, and a great number of bridges have been constructed on Provincial roads. During the

current year a large project, the canalisation of the Bhangor khal, has been undertaken, which will improve the boat route to Backergunge and extend the facilities for traffic with Eastern Bengal generally. The Orissa system of canals has been extended; and the Hijili Tidal Canal remodelled. Particular attention has been given to the construction of distributaries, and the collection of irrigation rates has been improved. In the Education Department, Provincial money has been spent on improving the teaching at the Sibpur Engineering College and adding to it a class for mining engineers, and a new set of workshops has been constructed for the practical training of the students; a Veterinary School and Hospital has been created in Calcutta; primary and female education have been extended; an industrial school has been opened at Patna; a new school for European boys is being constructed at Kurseong; a chemical laboratory has been added to the Presidency College; a new building provided for the School of Art in Calcutta; and finally, large additions have been made to the Eden Hindu Hostel, and the Calcutta Madrasa boarding-house has been begun with the object of providing suitable accommodation for all, or a large proportion, of both Hindu and Muhammadan students.

79. The list is a long one, but were it twice as long, much would still have been left to do. Where the claims to assistance are so numerous and so pressing as they are in Bengal, it is clearly out of the question that all should be met. The utmost that the Government can hope to accomplish is to allot the limited resources at its disposal as far as possible in accordance with the relative urgency of the demands which are put forward. Sir Charles Elliott trusts that he has applied this principle as equitably as circumstances permitted. He leaves the Provincial finances in a condition of exceptional prosperity, and he rejoices to think that his successor will be able to utilise the large balance with which the present year will close, in carrying out some of the projects and improvements which he himself has been unable to complete.

ORDER.—Ordered, that a copy of this Resolution be submitted to the Government of India, Department of Finance and Commerce, for information.

Ordered also, that a copy of the above Resolution be forwarded to the Board of Revenue; to all Commissioners of Divisions; to the Accountant-General; to the Inspectors-General of Civil Hospitals, Police, Jails, and Registration; to the Directors of Public Instruction and Land Records and Agriculture; to the Conservator of Forests; to the Port Officer, Calcutta; to the Superintendent of the Royal Botanic Gardens, Calcutta; to the Manager of the Eastern Bengal State Railway, and to all Departments of this Government, for information.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

*Secretary to the Govt. of Bengal.*



**RESOLUTION ON THE ADMINISTRATION REPORT OF THE CALCUTTA MUNICIPAL CORPORATION FOR THE YEAR 1894-95.**

MUNICIPAL DEPARTMENT—MUNICIPAL.

*Darjeeling, the 8th November 1895.*

RESOLUTION—No. 887T.—M.

READ—

The Administration Report of the Commissioners of Calcutta for the year 1894-95.

Read again—

The Report for the year 1893-94, and the Resolution recorded by Government thereon.

The Lieutenant-Governor regrets to observe that, notwithstanding the hope expressed in the Resolution on the previous year's report, that the delays which have occurred in past years in the submission of the Annual Report of the Commissioners to Government would be avoided, no efforts seem to have been made to secure the earlier submission of the present report, which was not received till six weeks after it was due, and then was accompanied by the remark that the Commissioners had been unable to consider the important part of it which is contained in the report of the Health Officer. With the means at their disposal the Commissioners ought to be able to complete their accounts and get the report printed within three months from the close of the financial year. They would then have a month to give to discussing the report, which would come before Government at the end of July as a well-considered expression of the views of the Commissioners on the work done by them in the course of the year. As it is the report bears throughout the stamp of haste and insufficiency. As a literary production it is unworthy of notice, and there are many discrepancies in the figures which require explanation. The collections of rates are rather worse than they have ever been before. Less has been done towards improvements. The drainage question as a whole, or even the part of it which affects the "added area," has not been grappled with. Great issues are at stake and important decisions have to be arrived at, but the time is consumed in endless discussions, and little practical advance is made. The settlement of the question regarding the statutory three lakhs to be expended annually on suburban improvements, and of the long pending acquisition case relating to 54, Clive Street, may be put on the opposite side, and are subjects for congratulation.

2. The post of Chairman was held by Mr. J. G. Ritchie throughout the year, while Mr. Harry Lee, the permanent incumbent, was absent on furlough. Since the close of the year, news of the death of Mr. Lee has been received, and the Lieutenant-Governor shares the regret which the Commissioners have felt at the loss of their late Chairman, who, while he held that office, performed his duties with characteristic zeal and ability. The year 1894-95 was the last of the administration of the Commissioners who came into office in April 1892, and a general election was held on the 16th March 1895. In 10 out of the 25 wards of the Municipality, the candidates who offered themselves for election were returned unopposed. In the 15 wards where contests took place, 70 per cent. of the voters recorded their votes, against 53 and 42 per cent. at the two previous elections. Of the 50 Commissioners elected, 36 were members of the last Corporation, and of the 14 new Commissioners, two had served on former occasions. The *personnel* of the Commissioners, both as regards race and profession, remains practically the same.

3. *Meetings and attendance of Commissioners.*—The Commissioners assembled in General meeting 27 times against 26 in the previous year. The General Committee appointed under section 63 of the Act met 53 times against 51, and the Standing and Special Committees appointed under section 65 met 48 and 22 times against 61 and 26 respectively in 1893-94. There were also 33 meetings of Sub-Committees against 35. The total number of meetings of all kinds was 183 against 199 in the previous year. Seventeen Commissioners attended more than 50 meetings, against 19 in the previous year. The Commissioners



who attended the greatest number of meetings were the Hon'ble Rai Durgagutty Banerjee Bahadur, C.I.E., 117 meetings; Babu Lall Behary Bysack, 111; Babu Radha Churn Pal, 107; and Babu Prya Nath Malik, 104. There was a falling off in the attendance of elected Commissioners, the average percentage of attendance being 55 against 61 in the previous year. The average percentage of attendance among the nominated Commissioners was the same as last year, viz., 46, while the percentage of attendance of members representing the Port Commissioners, the Trades' Association, and the Bengal Chamber of Commerce combined, rose from 39 to 53.

4. *Proceedings of meetings.*—The principal questions dealt with by the Commissioners in general meeting were the drainage of the suburban area, the provision of a public recreation ground at Marcus Square, the establishment of a hospital at Bhowanipore, the acquisition of the 54, Clive Street, site, and the statutory obligation of the Corporation to spend three lakhs annually on suburban improvements. No advance was made during the year with the scheme for the drainage of the Suburban area, as the Commissioners were awaiting the opinion of Mr. Baldwin Latham on the subject. The want of a public recreation ground in the northern part of the Town has long been felt, and at the instance of Government the Commissioners set apart the site known as Marcus Square for this purpose; the tank which formerly stood on that site has been filled up, and an area comprising a little over 13 bighas of land has been taken up and converted into a public recreation ground. The cost, towards which Government has contributed a grant of Rs. 50,000, has to be met in part from public subscriptions, and the Lieutenant-Governor trust that so much of it as still remains to be collected will soon be realized. The need of a hospital for the southern Suburbs of Calcutta has also been recognised for a long time, and the matter has been under the consideration of the Commissioners since the year 1890-91. During the year under review an arrangement was come to by which the Municipality gave up as a site for the proposed hospital a plot of land south of the Bhowanipur reservoir, measuring 128 cottahs 13 chittacks and 44 square feet, valued at Rs. 64,366; consented to the merging in the new hospital of the present Sumbhoo Nath Pundit Dispensary, which is to be sold, the name being preserved for the outdoor department of the new hospital, and the sale-proceeds appropriated towards the construction of the new building; and agreed to make an annual contribution to the new institution of Rs. 5,000, inclusive of the sum now contributed to the Sumbhoo Nath Pundit Dispensary. At the same time, Government undertook to contribute the remaining sum necessary for the construction of a building for the new hospital, and to continue to provide year by year the cost of maintenance in excess of the contribution from the Municipality. The new hospital, when ready, will be managed by a Board of five Governors with the Inspector-General of Civil Hospitals as President in addition. Three of the Governors will be nominated by Government and two by the Municipality. The plans and estimates, amounting to Rs. 90,539, for the construction of the new hospital, have already been approved by Government, and the building is now well advanced. The long pending appeal case in connection with the acquisition by the Commissioners of 54, Clive Street, was settled during the year by the Commissioners entering into a compromise with the appellant and paying him two lakhs over and above the amount awarded by the Judge in the Lower Court, with arrears of interest at 6 per cent. The acquisition of this piece of land,  $1\frac{1}{2}$  bigahs in extent, with the buildings upon it, has cost the Corporation over 11 lakhs. With the settlement of this troublesome matter, the Harrison Road account has now been practically closed, and it appears that the entire undertaking, including the electric lighting, the working of which is at present defective, has cost the Corporation Rs. 27,37,000 after deducting the sums recovered from the sale of surplus land. The Commissioners have arrived at last at a settlement of the long pending question regarding the method of calculating the statutory three lakhs to be expended by them annually on improvements in the suburban area. With the advice of counsel, who seem to have taken a broad and equitable view of the requirements of the law, the Commissioners have now determined the mode in which this account should be prepared, one of the chief items charged to it being the instalments of interest

and sinking fund payments on account of capital sums expended on the extension of the water-supply which was undertaken in anticipation of the amalgamation of the Suburbs with the Town. Details of the expenditure held to be debitable to this account since the year 1889-90, when the Suburbs were amalgamated with the Town, are given in Appendix I, Part II of the Report, of which the following is an abstract:—

	Rs.	A.	P.	Rs.	A.	P.
<b>Expenditure during 1889-90—</b>						
Interest and Sinking Fund on water-supply expenditure ...	78,390	0	0			
Improvements in Suburbs from revenue ...	28,853	8	10			
Cost of new lamps ...	10,055	0	0			
				1,17,298	8	10
<b>During 1890-91—</b>						
Interest and Sinking Fund on water-supply expenditure ...	1,36,026	0	0			
Improvements in Suburbs from revenue ...	89,104	15	11			
Cost of new lamps ...	17,975	0	0			
				2,43,105	15	11
<b>During 1891-92—</b>						
Interest and Sinking Fund on water-supply expenditure ...	1,68,304	0	0			
Ditto on expenditure on improvements incurred from capital, Rs. 1,00,289, at 5½ per cent. ...	5,516	8	0			
Improvements in Suburbs from revenue ...	2,08,401	2	0			
Cost of new lamps ...	2,520	0	0			
				3,84,741	10	0
<b>During 1892-93—</b>						
Interest and Sinking Fund on water-supply expenditure ...	1,74,239	0	0			
Ditto on expenditure on improvements incurred from capital, Rs. 2,71,727, at 5½ per cent. ...	14,943	8	0			
Improvements in Suburbs from revenue ...	52,762	0	9			
Cost of new lamps ...	15,115	0	0			
				2,57,059	8	9
<b>During 1893-94—</b>						
Interest and Sinking Fund on water-supply expenditure ...	1,83,735	0	0			
Ditto on expenditure on improvements incurred from capital, Rs. 3,05,545, at 5½ per cent. ...	16,802	8	0			
Improvements in Suburbs from revenue ...	1,31,943	11	4			
Cost of new lamps ...	7,357	8	0			
				3,39,838	11	4
<b>During 1894-95—</b>						
Interest and Sinking Fund on water-supply expenditure ...	1,86,147	0	0			
Ditto on expenditure on improvements incurred from capital, Rs. 2,47,551, at 5½ per cent. ...	13,615	0	0			
Improvements in Suburbs from revenue ...	1,22,170	0	4			
Cost of new lamps ...	21,379	7	9			
				3,43,311	8	1
<b>Total</b> ...				16,85,355	14	11

This account shows, that in lieu of 18 lakhs which should have been expended on suburban improvements during the past six years, Rs. 16,85,355 have been so expended. The balance, Rs. 1,14,645, will, it is said, be adjusted

during the current year. The Commissioners will therefore have to spend Rs. 4,14,645, on suburban improvements during the current year in order to bring this account up to date. Having regard, however, to the intricate character of the question and the length of time over which the transactions extend, the Lieutenant-Governor thinks that the account prepared by the Commissioners should be submitted for audit to some independent authority, which should report whether the items included in it comply with the interpretation of the law adopted by the learned counsel whose advice was taken on the subject, and that this report should be submitted for the information of Government.

5. *Loans.*—The loan liability of the Corporation at the commencement of the year was as follows:—

	Rs.	A.	P.
Unpaid balance of 6 per cent. debenture loan of 1866	5,000	0	0
5 per cent. debenture loans	1,44,01,900	0	0
4½ ditto ditto	30,48,300	0	0
Balance of consolidated loans from Government	1,74,55,200	0	0
Loan from Port Commissioners	51,11,493	7	7
	2,00,000	0	0
Total	2,27,56,693	7	7

No new loans were raised during the year, and the Commissioners were able to pay off nearly 4½ lakhs of their debt. The loan of Rs. 2,00,000 from the Port Commissioners towards the Harrison Road Fund, was repaid from the proceeds of the sale of surplus land, and Rs. 2,49,700-7-3 of the consolidated loans from Government, were repaid from revenue, leaving a balance of Rs. 2,23,16,993-0-4 as the loan liability of the Corporation at the close of the year. Against this they had in their Reserve Funds and in the Special Fund for the repayment of the loan of 1866, a total sum of Rs. 13,19,719-3-9, or Rs. 2,37,525-5-6 more than the amount in reserve shown last year, but the Government securities and municipal debentures were entered only at their par value in the report for 1893-94, while in the present report they are entered in the market value, which accounts in great measure for the difference. Since the close of the year the Corporation have, with the sanction of the Government of India, raised a further loan of 18 lakhs at 4 per cent., repayable after 15 years.

6. *Income and expenditure.*—The following statement compares the receipts and expenditure of the Municipality for the past two years:—

<i>Receipts.</i>		1893-94.	1894-95.
	Rs.	Rs.	Rs.
General rate at 9½ per cent.	16,55,787	16,93,235	
Sewage rate at 2 "	3,48,395	3,56,618	
Water rate at 6 "	10,45,207	10,69,443	
Lighting rate at 2 "	3,48,403	3,56,483	
Total of consolidated taxation at 19½ per cent.	33,97,792	34,75,779	
Taxes on trades and professions, carriages and animals, &c.	5,42,242	5,41,531	
Municipal market receipts	1,32,311	1,30,829	
Receipts from the sale of water	1,00,770	1,06,906	
Conservancy receipts	64,430	65,003	
Road Department receipts	78,585	35,621	
Slaughter-house receipts	37,939	44,522	
All other receipts	1,09,726	1,12,293	
Total	44,63,795	45,12,477	

	1893-94.	1894-95.
	Rs.	Rs.
<i>Expenditure.</i>		
Interest on loans ...	5,40,262	5,35,717
Contributions for repayment of loans ...	2,06,233	2,10,777
General establishment ...	3,86,046	3,82,427
General office expenditure ...	97,001	87,494
Road Department ...	3,66,133	4,36,533
Street watering ...	90,801	90,583
Ghowkhana ...	1,78,670	2,10,665
Conservancy ...	1,50,621	1,43,909
Bustee cleaning ...	1,02,431	97,978
Sewer cleaning and relaying charges ...	60,968	71,957
Hospital and vaccination charges ...	56,147	69,908
Suburban improvements ...	1,34,950	1,22,170
All other expenditure from the General Fund ...	2,31,662	2,58,257
Sewage rate charges ...	2,62,723	2,62,439
Water rate charges ...	10,68,586	10,63,845
Lighting rate charges ...	3,90,496	4,28,277
Total ...	43,24,030	44,72,936

There was an increase of Rs. 48,682 in the total revenue of the year as compared with that of the previous year. The income derived from each of the four rates levied in the Municipality shows an improvement which was due to enhancement of assessments on revaluation. The large falling off, Rs. 42,964, in the Road Department receipts is said to have been due chiefly to the remission granted to the Tramway Company, under the new agreement entered into with the Company. The total expenditure exceeded that of the previous year by Rs. 1,48,906. The increases are chiefly under Road Department Rs. 70,400, Gowkhana Rs. 31,995, and lighting charges Rs. 22,602. The cost of establishment and other charges were kept within the estimates of the year.

7. *Financial position.*—The year opened with net cash balances of Rs. 3,24,924 and Rs. 3,45,163 in the Revenue and Capital Funds respectively. During the year the total receipts of the Revenue Funds, as shown in paragraph 6 above, amounted to Rs. 45,12,477, and the expenditure to Rs. 41,72,936, leaving a net balance of Rs. 39,541 to be carried to account, while the receipts of the Capital Funds amounted to Rs. 2,65,937, and the expenditure to Rs. 6,52,822, leaving a considerable deficit, which was met in part by an advance of Rs. 1,10,159 from Revenue Funds. At the close of the year there was a net cash balance of Rs. 4,19,567 at credit of the Revenue Funds, while the Capital Funds showed a deficit of Rs. 63,248. This has since been replenished by the loan raised by the Corporation during the current year.

8. *Assessment and collection of the consolidated rate.*—During the year under report the revaluation of houses, lands and bustees in parts of the town, after the disposal of appeals filed under section 135 of the Calcutta Municipal Act, resulted in a net increase of Rs. 3,90,753. The assessed annual valuation of the town on 31st March 1895, therefore, stood at Rs. 1,98,41,008 against Rs. 1,94,50,255 on the same date in the previous year. Fair progress was made in the disposal of objections against assessments, notwithstanding the interruption of work in this department owing to the work imposed on it in connection with the general election of Commissioners, and the number of pending cases was reduced to 1,382 from 2,093 in the previous year.

The current demand of the consolidated rate was Rs. 37,61,513 against Rs. 36,80,274 in 1893-94, showing an increase of Rs. 81,239, but there was an outstanding balance of Rs. 5,06,066 remaining from the previous year, so that the gross demand for the year was Rs. 42,67,579. The gross collections amounted to Rs. 34,79,917, or a percentage of 81·5 on the gross demand, against a percentage of 82·07 in the previous year. The incidence of the consolidated rate per head of the population was Rs. 5-12-8 against Rs. 5-3-8 in the previous year, and that of the total municipal taxation Rs. 6-11-6 against Rs. 6-2-6.



9. The following statement, which is taken from paragraph 13 of the report, and to which column 11 has been added, shows the progress of demand and collections during the past five years:—

YEAR.	OUTSTANDING BALANCE OF CONSOLIDATED RATE ON 1st APRIL.				Total.	Current demand for the year.	Gross demand including balance.	Gross collection.	Percentage of collection on gross demand.	Arrears, i.e., column 6—column 9.
	Collector.	Joint Collector.	Warrant.	Assessor.						
1	2	3	4	5	6	7	8	9	10	11
1900-01 ...	Rs. 80,645	Rs. 42,809	Rs. 1,51,008	Rs. 67,498	Rs. 3,42,910	Rs. 53,85,145	Rs. 57,27,455	Rs. 30,87,131	85.00	Rs. 6,30,224
1891-92 ...	1,14,949	42,697	1,71,032	65,060	3,93,398	34,04,983	37,08,331	32,16,046	84.67	5,92,285
1892-93 ...	5,701	58,270	2,52,971	73,315	4,21,257	35,44,144	39,05,431	33,12,021	83.53	6,63,410
1893-94 ...	66,175	15,358	2,78,880	99,504	4,59,797	36,80,275	41,40,072	35,07,591	82.07	7,42,181
1894-95 ...	82,745	24,490	3,35,320	75,380	5,08,921	37,01,511	42,70,434	34,80,534	81.50	7,50,990

Out of the total arrears shown in column 11, Rs. 1,98,817 were cancelled or remitted during the year, leaving uncollected a sum of Rs. 5,91,083, the bills for which were distributed as follows:—

	Rs.		Rs.
Collector ...	1,08,607	Warrant Superintendent ...	3,66,492
Joint-Collector ...	28,476	Assessor ...	87,508

As the difference between the total arrear and the balance outstanding for recovery in each succeeding year is clearly due to remissions, it follows that, within the period covered by the statement, about 13 lakhs have been written off. Not only are no arrears recovered, but the gross collections never equal even the current demand in any single year. Of the total collections made in each department, 85.33 per cent. of the demand were received in the Collector's Department, 82.44 per cent. in the Joint-Collector's Department, and 32.5 per cent. in the Warrant Department, against 84.45, 83.06 and 40.1, the percentages of the previous year. There was an improvement in the work of the Collector's Department during the year, and a less amount transferred from that department to the Warrant Department, but the balance outstanding is still large, and has shown a steady increase for some years. The work of the Joint-Collector's Department, on the other hand, shows a falling off. The collections were much less than those of the two previous years, the amount being Rs. 6,09,413 against Rs. 6,82,811 in 1893-94, and Rs. 6,25,738 in 1892-93, while the percentage of the demand transferred to the Warrant Department for realization was 10.22 against 9.87 and 9.85 in the two preceding years. The falling off in the collections in this department is observed in all three classes of bills, viz., for owners' share of rates, occupiers' share, and bustee land. The work of the Warrant Department also shows a considerable falling off compared with the results of the previous year. There can be little doubt that the Commissioners lose heavily by not taking advantage of the powers which the law gives them to enforce prompt payment of municipal dues. All rates are payable at the beginning of the quarter to which they relate, and if proper arrangements were made for serving notices of demand, the bills ought to be in the hands of the Warrant Department before the close of the first month of the quarter.

10. *License and Registration Department.*—The following statement compares the gross receipts under the several heads in this Department during the past two years:—

	1893-94.			1894-95.		
	Rs.	A.	P.	Rs.	A.	P.
I.—Tax on trades and professions ...	3,46,839	7	3	3,44,183	14	9
II.—Tax on carriages and animals ...	1,43,338	12	6	1,44,004	4	1
III.—Cart registration fees	72,027	8	0	72,760	8	0
IV.—Fees for the removal of trade refuse	60,741	0	0	61,351	2	0
V.—License fees for cowsheds, &c.	37	0	0	53	0	0
VI.—Registration fees for hackney carriages, &c. ...	17,864	4	6	19,382	2	0
VII.—Miscellaneous receipts ...	719	14	0	688	14	0
VIII.—Fines under section 90 of the Calcutta Municipal Act ...	8,405	8	6	8,027	11	4
IX.—Fines under section 80 of the Calcutta Municipal Act ...	968	0	0	1,043	0	0
Total ...	6,50,939	6	9	6,51,494	8	2



There was a slight improvement in the total receipts in this department, though the receipts under the head of Trades and Professions showed a falling off to the extent of Rs. 2,655. The amount derived from the tax on carriages and animals is the largest yet collected, and reflects credit on the vigilance of the officers connected with this department. The reasons assigned for the falling off in the receipts under the head of Trades and Professions are (1) that a number of Joint Stock Companies which had paid the tax for 1893-94 withheld payment for 1894-95 pending the decision of the High Court, in a test case brought against the Standard Marine Insurance Company, Limited, which had disputed its liability to the tax; (2) that depôts of wood, straw, hay and other inflammable materials, which were formerly subject to a license fee at a uniform rate of Rs. 25, are now, under the Fire-Brigade Act of 1893, only liable to pay fees at varying rates which yield a smaller income; and (3) that the collection of the tax was retarded by the severe epidemic of small-pox which prevailed in the town during the last quarter of the year. The total number of licenses for trades and professions issued during the year was 25,098 against 25,983 in the previous year. The total number of carriages taxed during the year was 5,236 against 5,212 in 1893-94, and the number of horses and ponies taxed was 6,785 against 6,778. The number of hackney carriages registered rose from 3,452 to 3,594, the increase being shared by all three classes of these conveyances.

11. *Market, lighting, printing.*—The income from the municipal market rose from Rs. 1,28,311 to Rs. 1,31,033, and the profit to the Commissioners, after payment of all charges, was Rs. 1,11,933 against Rs. 1,07,815 in the previous year. The numbers of gas and oil lamps in Calcutta at the close of the year were 6,079 and 1,953 respectively, against 5,952 and 1,647, the numbers of the previous year, showing an increase of 127 in gas lamps and 306 in oil lamps. These figures, however, disagree with those given in the table in paragraph 187 of the Report, which shows an increase of 92 in gas lamps and 210 in oil lamps. This discrepancy should be explained. The actual cost of lighting was Rs. 3,86,159 against Rs. 3,58,967, showing an increase of Rs. 27,192, due to the increased number of lamps. The printing department appears to have worked satisfactorily, resulting in a net profit to the Corporation of Rs. 5,113.

12. *Survey.*—The work of laying down boundaries in connection with the resurvey of the town was completed, and a number of surveys were made in connexion with projects of improvement and boundary disputes. The Assessor and Surveyor disposed of 20,772 cases out of a total of 20,886, leaving 114 pending at the close of the year, against 139 in the previous year.

13. *Litigation.*—The number of fresh civil suits in which the Corporation appeared as plaintiff during the year was 122, the same number as in the previous year. Besides these they appeared as plaintiff in 30 pending cases of the previous year. Of the 122 new suits, 121 were for the recovery of rates and miscellaneous dues involving Rs. 34,045, and one for ejectment against Kanai Lal Pandit, who refused to vacate a part of 54, Clive Street, after it had been acquired by the Corporation, as he had an idol located there. The order of ejectment having been passed by the Court, it was duly carried out, and the building was dismantled by the Commissioners. Of the 121 suits instituted by the Corporation for the recovery of dues, 61 were decreed, 8 were compromised, and 52 remained pending at the close of the year. As in the previous year, no cases were dismissed by the Court. The large number of pending cases is said to have been due to many cases having been instituted in March 1895. Of the suits in which the Corporation appeared as defendant, the suit for trespass brought by Rajendra Dutt in 1889-90 remained unsettled, as the arbitrators made no award during the year. This case has been pending for a long time, and the arbitrators should be pressed to give their award. The acquisition case relating to 54, Clive Street, was, as already noticed in the earlier part of this review, successfully compromised. In another suit, which was decided after the close of the year, the Court passed a perpetual injunction on the Commissioners, forbidding them the use of the old trenching ground at Goragacha, and gave permission to the plaintiffs to file a similar suit in respect of the new ground recently opened at the same place. An important test suit was brought during the year against the Standard Marine Insurance Company,

to determine the disputed question whether Insurance Companies were liable to pay license tax under section 87 of the Calcutta Act. The Honorary Magistrate who tried the case decided that they were, but on appeal his judgment was reversed by the High Court, which held that a Company carrying on the business of insurance was not liable to assessment under section 87, as the business of insurance was not one of the occupations mentioned in schedule 2 of the Act. By this decision the Commissioners lose a revenue of nearly Rs. 10,000 a year. As there is no reason why these Companies should be exempted from taxation, and as it was not the intention of the Legislature that they should be exempted, steps will be taken to amend the law so as to render them and other Companies covered by the decision of the High Court liable to assessment in future. There were 14 appeals to the Small Cause Court under section 137 of the Act, against assessments of houses and lands, with the result that in three cases the assessment was reduced by the Court, five were amicably arranged out of Court, five were dismissed with costs, and one remained pending at the close of the year. The number of cases instituted by the Corporation in the Police Courts increased from 14,087 to 16,941, of which 9,667 were successful, 805 were unsuccessful, 4,230 were withdrawn or struck off, and 2,239 remained pending at the close of the year. The amount of fines imposed on the persons prosecuted in these cases amounted to Rs. 24,776-8 against Rs. 18,717-4 in the previous year. The largest number of prosecutions were, under sections 80 and 90 of the Act, instituted by the License Department, the number being 11,211 against 9,729 in the previous year. The prosecutions instituted under section 212 by the Road Department also increased from 783 to 1,398, which shows that the laxity in this Department, complained of in the previous year, has to a great extent been removed. The number of prosecutions instituted by the Health Department under the Vaccination Act was 562 against 631 in the previous year, and the fines imposed in these cases amounted to Rs. 106-8 against Rs. 72-12. The cost of the litigation undertaken by the Corporation during the year amounted to Rs. 33,202-10 against Rs. 25,064-9-1 in 1893-94.

14. *Education.*—Not a word is said in the report of the question of increasing the municipal contribution towards primary education in Calcutta, which has been pressed upon the Commissioners by this Government and the Government of India. It appears from the statement of General Fund expenditure given in Appendix F, Volume II, that a sum of Rs. 3,564 was expended during the year on general education, and that a grant of Rs. 900 was made to a school for the deaf and dumb. It is not stated how the former grant was distributed. As it is desirable that this information should be furnished, a statement similar to that given in paragraph 227 of the Report for 1893-94 should in future be included in the Annual Report of the Corporation. The Lieutenant-Governor observes with surprise the reluctance of the Commissioners to make the allotment of Rs. 10,000 which has been suggested as the smallest sum which the Commissioners can properly devote to a purpose which is universally recognised as holding a high place among the legitimate obligations of local authorities.

15. *Town and Bustee improvement.*—The total amount expended during the year on town and bustee improvements was Rs. 76,138 against Rs. 92,102, Rs. 1,41,730, and Rs. 1,61,334 in the three preceding years. The Capital Fund from which this expenditure is met opened the year with a balance in hand of Rs. 19,169. The receipts during the year, including a contribution from Government of Rs. 30,575 for improvement of the bustee in Hastings, amounted to Rs. 69,108, and the closing balance was Rs. 12,139. Of the total amount expended, Rs. 43,346 represents expenditure on town improvements, which consisted chiefly of the construction of new roads and the widening of existing thoroughfares, and Rs. 32,792 expenditure on bustee improvements, filling up of tanks in the Town and Suburbs, construction of squares, and construction of urinals. This is a small amount to spend considering the state of many of the bustees and the urgent need in which they stand of improvement. Only Rs. 7,634 was spent on the improvement of the Hastings bustee. The Lieutenant-Governor hopes that the full amount granted by Government for this purpose will be expended and early steps taken to complete the scheme for placing this area in a thoroughly sanitary condition.

16. *Engineers' Department.*—The new Worthington engine at Tallah, the largest pumping engine in India, has been erected and is working satisfactorily. Nearly 4·91 miles of pipe were added to the distribution system, making the entire length 307 miles, the number of premises connected being 25,286. The average daily supply of filtered water during the year was 20,248,268 gallons, which is the largest on record, giving a daily consumption per head of the population of 36·66 gallons in the Town proper and 19·94 gallons in the suburban area. In addition to this, an average daily supply of 112,007 gallons of filtered water was afforded to Barrackpore, and 29,334 gallons to the Manicktolla Municipality. The Dum-Dum Cantonment and the Cossipore-Chitpur Municipality have also been connected with the Calcutta supply, the former receiving 31,911 gallons a day, and the latter a minimum supply of 310,000 gallons a day. The daily supply of unfiltered water, which obtains in the Town proper only, was on an average 4,578,099 gallons, allowing 11·02 gallons per diem per head of the population. This system now comprises 76·63 miles of pipes, 2,885 ground hydrants for watering roads, 271 connections to sewer flushing chambers, 86 bathing platforms, 151 public latrines, and 966 connected premises, and further extensions are contemplated. The Lieutenant-Governor is glad to notice that three cast-iron cattle drinking-troughs were presented to the town during the year by private individuals. There are now 76 of these troughs in the town, all connected with the filtered water-supply.

17. *Health Department.*—The vital statistics of Calcutta for the year 1894 correspond in their essential features to those recorded for the entire Province during the same period. The number of births fell from 13,492 to 11,438, and the birth-rate per thousand of population from 19·7 to 16·8. A comparison of the figures with the mean of the previous five years shows the decline to have been highest in the months of March, August and September, and to have occurred mainly in the Town proper, the falling off in the Suburbs being comparatively slight. No comments on the figures are given in the Health Officer's report. The number of deaths rose from 20,113 to 22,441, and the death-rate per thousand from 29·5 to 32·9, the increase in the Town proper being 2·7 per thousand more than in the Suburbs. Of the total increase of 2,328 deaths, 872 were due to fever, 826 to cholera, and 374 to small-pox.

*Fever Mortality.*

YEARS.	CALCUTTA.		24-PARGANAS.	
	Number of deaths.	Ratio.	Number of deaths.	Ratio.
1	2	3	4	5
1876	5,300	12·6	31,068	15·93
1876	4,337	10·8	29,065	14·89
1877	5,087	12·4	29,603	15·79
1878	6,029	14·7	29,241	15·67
1879	4,748	11·6	23,035	12·26
1880	3,767	9·1	24,042	13·28
1881	3,716	9·3	30,379	16·18
1882	3,678	8·8	24,925	15·40
1883	3,402	8·4	23,467	14·40
1884	3,577	8·9	22,485	13·95
1885	3,891	9·4	22,564	13·93
1886	3,980	8·4	20,511	12·09
1887	3,107	7·9	25,042	15·84
1888	3,166	7·8	20,153	16·64
1889	3,307	8·2	22,694	18·68
1890	4,112	9·4	26,692	16·07
1891	4,614	10·6	32,185	17·61
1892	4,593	10·5	31,167	17·62
1893	4,703	10·7	31,886	16·85
1894	5,667	12·9	32,650	17·26

1870. Sewer outfall completed.  
1874. South Calcutta drained.  
1888. Whole of Calcutta drained.

in 1874. It will be observed that the Calcutta death-rate shows considerable fluctuations, and that the mortality in the last year of the period is only ·1 per thousand in excess of that recorded twenty years ago, when the cause put forward by the Health Officer could not have begun to operate. Were that cause the true one, the water-logging and pollution of the soil in the neighbourhood of the sewers would have gone on increasing throughout the period, and the ratio of deaths from fever would have tended to keep pace with it. No such tendency can be traced in the recorded statistics; on the contrary, a marked fall in the mortality occurred in 1880, and lasted without any material increase and with occasional decreases until 1891, when the rate rose to 10·5 and

The Health Officer attributes the increased mortality from fevers in Calcutta almost entirely to the defective condition of the sewers, which at certain states of the tide become blocked and leak into the surrounding soil. This state of things is no doubt highly insanitary; but the hypothesis that leakage from the sewers is the cause of the increased deaths from fevers does not seem as yet to have been established. The statement given in the margin compares the fever mortality in Calcutta and in the 24-Parganas for the last twenty years—a period selected with reference to the fact that the drainage of the southern portion of the Town was completed



continued substantially at that level until last year. On comparing the Calcutta statistics with those for the surrounding country, a certain degree of correspondence between the two sets of figures may be traced, and the conclusion which they seem to indicate is that the prevalence of fever in both areas is determined in the main by the general causes which produce fever everywhere in Bengal; but that the operation of these causes in Calcutta is counteracted to a varying extent by improved sanitary conditions, among which the reduction of subsoil moisture by drainage occupies a prominent place. There is, however, another aspect of the question upon which unfortunately neither these statistics nor the Health Officer's report throw any light. Assuming that at certain states of the tide percolation takes place from the Calcutta sewers into the adjacent soil, it seems *prima facie* unlikely that this would produce saturation to an extent sufficient to bring about any marked increase in ordinary fever; but as the fluid which thus finds its way into the soil is largely composed of sewage, some increase of fevers of a typhoidal character might probably be looked for. That such fevers had in fact greatly increased was alleged on the authority of the Health Officer by the Chamber of Commerce, in their letter to Government of the 10th July, complaining of the Goragacha trenching-ground; and in communicating to the Corporation the reply of Government to that letter, the Chairman was particularly asked that "a full report, supported by the necessary statistics, might be called for from the Health Officer, on the allegation that typhoidal fevers are on the increase in Calcutta." It was obviously desirable that the grounds for so alarming a statement should be fully set forth and examined, and the Lieutenant-Governor expected that the Health Officer would be able to show from hospital statistics, and from records of cases treated by medical men, exactly what proportion of the increased mortality from fever consisted of cases which could reasonably be attributed to the action of sewage pollution, and would further be able to say in what parts of the town such cases had occurred, and what relation their distribution bore to the areas where leakage from the sewers is most prevalent. In reply to this request, Dr. Simpson reported that the number of deaths from typhoid fever during

1891	...	7	1893	...	8
1892	...	4	1894	...	8

the last four years was as stated in the margin. He also observed: "The general fever mortality of Calcutta has, however, within recent years increased, and from conversations I have had with medical men attending such cases, I gather that many of them assume a typhoidal aspect, and more especially of late years," and added that "this subject and the local causes at work in the production of Calcutta fevers" had been fully dealt with in his annual report. The report, however, contains no reference to typhoid, and deals merely with the increase in ordinary fevers which has been discussed above. It is a matter for much regret that after lending the weight of his authority to the statement that typhoidal fevers are largely increasing in Calcutta, the Health Officer should have neglected to comply with the request that the grounds of that opinion might be fully set forth. Owing to this omission it is impossible, as the matter now stands, to arrive at any certain or even probable conclusion on the important question whether the increase in fever mortality which has occurred during the last three years in Calcutta is due to purely local causes which admit of being diminished or removed, or to general causes affecting the whole surrounding country, which it would be vain to attempt to cope with. The position is a very unsatisfactory one, and illustrates the damage that may be done to sanitary progress by making vague general assertions and withholding the evidence upon which they are based.

Small-pox raged with some severity during the latter part of the year, the number of deaths from this cause being 405, of which 346 were in the Town proper and 59 in the Suburbs. During the epidemic every possible means of staying the progress of the disease was adopted, and vaccination was freely resorted to, with the result that 17,335 operations were performed against 14,977 in the previous year. Owing to the large number of small pox patients sent to the Campbell Hospital, the accommodation available at that institution was found to be insufficient, and temporary sheds for patients had to be erected in the compound of the hospital. The need of a permanent hospital for small-pox patients, to provide against an emergency such as that which arose during the late epidemic, was considered by the Commissioners,

who went so far as to offer a site and a grant of Rs. 5,000 for the construction of the necessary building; but the matter was dropped when the epidemic subsided, the Commissioners contenting themselves with making an increase of Rs. 5,000 to the annual grant made to the Campbell Hospital. Cholera did not appear in an epidemic form during the year, but the number of deaths recorded from this cause was 1,695, of which 1,118 were in the Town and 577 in the suburban area. Professor Haffkine's system of anti-choleraic inoculation was introduced by the Commissioners as a tentative measure for one year, and a grant of Rs. 7,500 was sanctioned by them to defray the cost of the trial. A full account of what was done is given in the Health Officer's report, and although the results are as yet inconclusive, the question is one of such surpassing interest that the Lieutenant-Governor would be glad to see the experiment continued.

18. *Drainage.*—The extension of the sewerage system to Entally was proceeded with during the year, and is approaching completion. In the Town proper 3,135 lineal feet of pipe sewers were laid, and the sewerage of the land along the Port Commissioners' railway between Sobha Bazar Street and Kumartoli Street was completed. In the canal fringe area improvements were effected in the drainage along the Bahir Mirzapore Road. The long-pending scheme for the drainage of the whole suburban area south and south-east of the Town proper was discussed during the year, and a report, drawn up by Mr. A. J. Hughes, in consultation with Mr. James Kimber, the Engineer to the Corporation, on the subject, was sent to Mr. Baldwin Latham for his opinion. This has since been received, and will no doubt be carefully considered by the Corporation as soon as the additional data required by Mr. Latham have been collected. The Lieutenant-Governor trusts that no delay will occur in carrying out these instructions, and that an early decision will be arrived at on a question which is of vital importance to the health and prosperity of Calcutta.

Since the close of the year the Commissioners have adopted the temporary scheme proposed by Mr. Baldwin Latham for discharging the night-soil of about three-fourths of the population of the Suburbs into the Circular Road sewer at an estimated cost of Rs. 1,08,200. The adoption of this scheme, which will, it is understood, be completed by the 1st of March, when the Corporation are bound to discontinue the trenching operations now being conducted, as a strictly temporary measure, in the neighbourhood of the Docks, will finally get rid of the serious difficulties which have arisen in connexion with the trenching-grounds at Goragacha and other places in the suburban area, and the Lieutenant-Governor congratulates the Commissioners on the fact that they have at last bestirred themselves to action on this important subject. It is assumed that the question whether additional pumping machinery will be required at Palmer's Bridge has been or will be carefully considered.

19. For some years past the Health Officer has urged upon the Corporation the necessity of amending the building regulations now in force in Calcutta, so as to make provision for fixing the minimum width of public streets, limiting the height of houses in relation to the width of the streets, controlling the construction of brick buildings on bustee land, fixing the minimum sizes of court-yards within houses, and the minimum space to be left between the back of houses for the purpose of ventilation. These points are doubtless of great importance, and the Health Officer is right to lay stress on them; but the question of passing a special Building Act can hardly be dealt with in a Resolution reviewing the work of the Municipality during the year, and it is necessary, before such a step is taken, to examine the provisions of the existing law in order to see how far they are defective. The Commissioners have, it is said, recently appointed a Committee to report on the difficulties that have arisen in the interpretation and working of the building regulations contained in the Calcutta Municipal Act, and of the bye-laws passed by them. The report of this Committee will be awaited. Meanwhile it can only be said that when life and health are in question the owners of property cannot be permitted to assert, in so broad and absolute a manner as is involved in the claim put forward in paragraph 291 of the Report, that whatever land is required for the construction of roads should be taken up at the cost of the public, and that owners should under no circumstances be called upon to surrender any portion of their existing rights. The bent of modern opinion



in the more advanced countries is distinctly adverse to such uncompromising claims, and this view will sooner or later make itself felt in Calcutta, and will result in some equitable restrictions being imposed on the rights of property where the owners benefit largely by municipal improvements to which they contribute no more than any ordinary rate-payer.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

*Secretary to the Government of Bengal.*

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## REORGANISATION OF DEHRA FOREST SCHOOL

No. 4842 For.

**THE following is published for general information.**

C. E. BUCKLAND,  
*Secretary to the Govt. of Bengal.*

REVENUE DEPT.—For.,  
CALCUTTA,  
The 7th November 1895.

Circular No.  $\frac{20}{272-2}$  F.

*Extract from the Proceedings of the Government of India, in the Department of Revenue and Agriculture (Forests), dated Simla, the 25th October 1895.*

READ—

- (i) Circular Resolution of this Department, No. 11-F., dated 28th June 1893, promulgating rules to regulate the constitution of, admission to, and studies and discipline at, the Imperial Forest School, Dehra Dun.
- (ii) Circular of this Department, No. 9-F., dated 29th May 1895, forwarding copies of the resolutions passed by the Board of Control of the Imperial Forest School in March 1895.
- (iii) Letter from the Inspector-General of Forests, No. 793, dated 9th September 1895, regarding the fourth and sixth of the resolutions passed by the Forest School Board of Control in March 1895.

## RESOLUTION.

The Director of the Imperial Forest School and his staff having noticed the difficulty which the students experience in intelligently assimilating the lectures with which the School course commences, and which deal with technical subjects in their relation to the practice of forestry, proposed, following the example of the Forest Schools of Europe, that the students should join the School each year on the 15th April instead of on the 1st July, in order that they might commence their studies with practical work in the forests under an Instructor, and thus become to some extent familiar with the forests and the nature of the work to be done in them, as a preliminary to the study in the class-room of silviculture and forest-mathematics.

Under this proposal, which has received the approval of the Government of India and to which effect will be given from the beginning of the year 1897, the School course will last  $23\frac{1}{2}$  instead of 21 months as at present; and it will be necessary to hold the examination for entrance into the School in January instead of in March. The additional expenditure entailed on each student by the change will be as follows:—

(a)	For a European student of the Upper Class	...	...	Rs. 112½
(b)	„ Native „ „	...	...	87½
(c)	„ „ „ Lower „	...	...	70

2. The Government of India have also approved of a recommendation by the Board of Control that Rule 15 of the Forest School Rules should be amended, so as to allow of candidates for the Lower Class, who are already in Government service, being admitted into the School, even though they may be 25 years of age or over, and may have been in the Subordinate Forest Service for less than three years. The conditions now imposed by Rule 13 (ii), (a) and (c), may therefore be waived by a special order of the Local Government or Administration in the case of any Government student whom it may be in future proposed to send to the Lower Class.

3. It has also been found desirable to make some other small corrections of minor importance in the rules. Appended to this Resolution is a copy of the Forest School Rules as new amended. The alterations effected in the rules noted in the margin\* will not take effect till the 1st January 1897; but the amendments made in the remaining rules† will come into force on and after the 1st January 1896.

\* 4, 5, 10, 12 (i) (c), (v) [except the addition to the fourth subject of examination], and (viii); 13 (last clause), 14, 15 (ii) and (iii); 18, 19, 20 and 21.

† 12 (v) [addition to fourth subject of examination]; 13 (a), (b), and (ii); and 15 [new clause (iv)].

ORDER.—Ordered that a copy of this Resolution, with its appendix, be forwarded, for information, to the Governments of Madras and Bombay, the Local Governments and Administrations noted in the margin, the Inspector-General of Forests, and the Comptroller and Auditor General.

Bengal.  
North-Western Provinces  
and Oudh.  
Punjab.  
Central Provinces.  
Burma.

Assam.  
Coorg.  
Ajmere.  
Andamans.  
Baluchistan.  
Hyderabad.

ORDERED, also, that a copy be forwarded to the Foreign Department for transmission to the Durbars of such Native States as have a Forest Department.

ORDERED, further, that the resolution, with its appendix, be published in the Supplement to the *Gazette of India*.

(True Extract.)

DENZIL IBBETSON,

*Offg. Secretary to the Govt. of India.*

#### APPENDIX.

#### RULES TO REGULATE THE CONSTITUTION OF, ADMISSION TO, AND STUDIES AND DISCIPLINE AT, THE IMPERIAL FOREST SCHOOL, DEHRA DUN.

##### *Section I.—Constitution and Studies.*

1. The School is under the administrative control of the Inspector-General of Forests, who is assisted by a Board consisting of—

- (1) the Inspector-General of Forests, *President*,
- (2) the Director of Public Instruction, North-Western Provinces and Oudh,
- (3) the Director of the School,
- (4) one Conservator from each province (not more than three serving in any given year),

with, as *Secretary*, the Assistant Inspector-General of Forests.

2. The Superior Staff of the School consists of—

- (1) the Director,
- (2) the Deputy Director,
- (3) & (4) two Instructors,
- (5) the Vernacular Instructor,

assisted by the Forest Officers of the School Circle, North-Western Provinces.

The Conservator of Forests, School Circle, North-Western Provinces, will ordinarily be Director of the School. The Deputy Director and two Instructors are officers of the Indian Forest Service on the Imperial List. The Vernacular Instructor is an officer of the Provincial Forest Service—also on the Imperial List.

3. The Director of the School is charged with (1) the general administration of the institution, including the regulation of the course of study under the arrangements prescribed by the Board of Control, subject to the sanction of the Government of India; (2) the supervision of the School buildings, quarters, and gardens; (3) the control of the accounts, and the conduct of correspondence.

4. *Courses*.—There are two courses: one in English, the other in the Hindustani language. Each course lasts 23½ months. The English course is that followed by the "Upper Class;" the Hindustani course, that followed by the "Lower Class." The first year's students are called "Juniors;" the second year's students, "Seniors." In the English course, students are prepared for the certificate in Forestry by the "Higher Standard;" in the Hindustani course, for that by the "Lower Standard."

The subjects taught in these courses are the following, described in the School syllabuses:—

1. Forestry, including Sylviculture, Utilisation and Forest Working-Plans, both theoretical and practical.

2. Mathematics—elementary Arithmetic, Algebra, Trigonometry, and Mechanics, in their application to forest questions.
3. Physical Science, including Chemistry, Physics, Physiography, Geology, Mineralogy and Soils.
4. Botany, both theoretical and practical, including the collection and preservation of plants.
5. Zoology—the classification of animals and the study of useful and dangerous species, especially of insects, including the collection and preservation of specimens.
6. Drawing, Surveying and Estimating, as required for forest officers.
7. Forest Engineering, theoretical and practical.
8. Forest Law, the elements of Criminal Law, and departmental organisation.
9. Forest Accounts and Procedure.

5. *Terms.*—The terms of study are as follows :—

1st year—	Preliminary term—April 15th to June 15th, in camp.
	Vacation—June 16th to June 30th.
	Rains term—July 1st to October 31st, in Dehra Dun.
	Winter term—November 1st to December 22nd, in camp.
	Vacation—December 23rd to January 5th.
2nd year—	Spring term—January 6th to March 31st, in camp.
	Hill tour term—April 1st to May 31st, in camp.
	Vacation—June 1st to 30th.
	Rains term—July 1st to October 31st, in Dehra Dun.
	Winter term—November 1st to December 22nd, in camp.
	Vacation—December 23rd to January 5th.
	Spring term—January 6th to February 15th, in camp.
	Examinations, including survey test—February 16th to March 31st.

6. *Examinations.*—The School examinations are —

1. Monthly, to test progress and application.
2. Final.

The *Monthly examinations* are usually held on the last two working days of each month, as the Director may order. The marks obtained at these examinations are counted for one-fourth of the aggregate at the Final.

The *Final examinations* are held in March of the 2nd year, and the marks then obtained count for three-fourths of the aggregate.

7. *Certificates.*—There are two certificates obtainable in each class, after the final examinations: a “pass” certificate and an “honours” certificate. The former is granted to students who obtain over 50 per cent. of the aggregate marks allotted to all subjects, provided this includes 50 per cent. of the marks allowed for each of the subjects of Forestry, Botany, Surveying, and Engineering. The latter is granted to students who obtain over 75 per cent. of the aggregate marks allotted to all subjects, including over 50 per cent. in each individual subject. These certificates are only granted on the orders of the Board of Control, who have authority to exercise their discretion in doubtful cases.

8. *Prizes.*—The School medals are awarded by order of the Board of Control, but only if “honour” marks (75 per cent.) have been obtained. Other prizes, whether given by Government or other donors, are also awarded by the Board of Control.

9. Should any student, of the three categories enumerated in Rule 11, be unable (a) to appear at the final examinations, or, having appeared, (b) fail to pass those examinations, he will not be permitted to appear at any subsequent final examination, unless he follows a second time the whole course of instruction at the School, or, at the discretion of the Director, the second year's course.

#### Section II.—Admission Rules.

10. The total number of students of each class who can be admitted into the School each year will be limited to such number as the Board of Control may decide, from time to time, can be accommodated in the School. The number of studentships to be allotted each year to the respective Provinces, as well as the number of nominations to be made by the Director, will, with due regard to the total prescribed by the Board of Control, be decided by the Director of the School before the 1st of November, after consultation with the Provincial authorities as to their requirements, and communicated to the Local Governments concerned.

#### A.—Upper Class.

11. There are three categories of students in the Upper Class—

- (1) Private students.
- (2) Students already in the Government service.
- (3) Students deputed by Native States.

12. *Private students* comprise all those students who are at present without appointments in any Forest Service, and whose object it is, by becoming possessors of Forest School

certificates, to obtain employment either in the Forest Service of the Government of India or in that of a Native State, or some other owner of forest-property.

- (i) Candidates for admission to the Forest School as private students must not be less than 18 or more than 25 years of age, and their applications must be sent to a Conservator of Forests\* through a Divisional Forest Officer, of rank not below that of an Assistant Conservator of the 1st grade, or through a Collector or other district officer. Neither the Conservator, the Divisional Forest Officer, nor the Collector need belong to the forest circle or province in which the candidate seeks employment; but Divisional Forest Officers and Collectors may not forward to
- \* Conservator of Forests, Bengal Circle, at Darjeeling.
  - Conservator of Forests, Assam Circle, at Shillong.
  - Conservators of Forests, North-Western Provinces and Oudh—  
School Circle, at Dehra Dun.  
Central Circle, at Naini Tal.  
Oudh Circle at Naini Tal.
  - Conservators of Forests, Central Provinces—  
Southern Circle, at Nagpur.  
Northern Circle, at Jabalpur.
  - Conservator of Forests, Berar Circle, at Amraoti.
  - Conservator of Forests, Punjab Circle, at Lahore.
  - Conservators of Forests, Upper Burma—  
Eastern Circle, at Mandalay.  
Western Circle, at Mandalay.
  - Conservators of Forests, Lower Burma—  
Pegu Circle, at Rangoon.  
Tennasserim Circle, at Rangoon.
  - Conservators of Forests, Madras Presidency—  
Northern Circle, at Waltair.  
Central Circle, at Madras.  
Southern Circle, at Coimbatore.

Conservators applications unsupported by the five certificates enumerated below, namely:—

- (a) A certificate that the candidate is a "Native of India," within the meaning† assigned to those words by section 6 of 38 Vict., Cap. 8.
- (b) A certificate of age.
- (c) A health certificate in the form prescribed by article 61 of the Civil Service Regulations, signed by the Civil Surgeon of the district in which the said Divisional Forest Officer's or Collector's duties lie, and testifying to the candidate's sound constitution, good vision and hearing, and general physical fitness for a rough outdoor life in the Forest Department.
- (d) A certificate of respectability and good moral character from two or more persons whose social or official position can be accepted as a guarantee of reliability.
- (e) A certificate from an officer of the Education Department, of a rank not less than that of a Deputy Inspector of Schools or the Head Master of a High School under public management, to the effect that the candidate's education appears sufficiently good to give hopes of his being able to pass the entrance examination.

The last three certificates must bear date not further back than the 1st August of the year preceding that in which the candidate proposes to present himself at the entrance examination.

If any person, giving certificates as above under (c), (d), and (e), is in a position to mention anything more to the credit of the candidate than the certificates actually call for, he may do so.

- (ii) Upon the receipt by the Conservator of any application in respect to which the preceding conditions shall have been observed, that officer may either accept or reject the application, without assigning any reason for so doing; or he may require the candidate to produce other or better certificates in person before him.
- (iii) Conservators may, at their option, test the fitness of a candidate who desires to enter the service of Government by practical work in the forests.
- (iv) Those candidates who have been approved by the Conservator will be permitted, under his recommendation, to appear at the next entrance examination for the Forest School held in his circle.
- (v) The Entrance examination is held in the month of January each year, on such date as may be fixed by the Director, both at the Imperial Forest School and at such centres as may be fixed from time to time by Local Governments, and under such officers, Educational, Revenue, Forest, or other, as may be appointed: provided that the date shall be communicated by the Director to Local Governments and Conservators on or before 1st November. The subjects of examination are:—

					Minima pass marks.	Per cent.
1.	English	( Conversation ...	...	...	...	50
		) Composition ...	...	...	...	33
2.	Arithmetic	...	...	...	...	40
3.	Algebra, up to and including quadratic equations	...	...	...	...	40
4.	Elements of Euclid, books I to IV and book VI, with examples	...	...	...	...	25
5.	Mensuration—lengths, areas and volumes, with examples	...	...	...	...	25

\* "Native of India" means any person born and domiciled within the dominions of Her Majesty in India, or within the territories of Indian Princes tributary to or in alliance with Her Majesty, of parents habitually resident in India, and not established there for temporary purposes only. (Article 45, Civil Service Regulations.)



The examination papers on the above subjects will be forwarded by the Director in sealed covers to such officials as the Local Governments may direct in the month preceding the examination.

- (vi) A Local Government may lay down rules under which the number of candidates allotted, under Rule 10, to the Province for admission into the School, shall be selected from the number of passed candidates. In such rules due regard must be had to the place taken in the examination, but the Local Government shall not be debarred from preferring, for good and sufficient reasons, a passed candidate who may have taken a lower place in the list to one higher on the list: provided that the Director may, after inspection of the papers of the selected candidates, place before the Local Government an objection to the admission of any of such candidates on the ground that he is below the required standard.
- (vii) The Local Government may, if it thinks fit, exempt from the entrance examination any candidate who is a Bachelor of Arts, or who has obtained a degree or diploma of about the same standard at any university in India or in the United Kingdom or in a British Colony, or at any educational institution to which the Government of India may extend the privilege: provided that such degree or diploma shall not give such candidate a preferential claim over any candidates who have passed the entrance examination and who may appear more eligible for the Forest Service.
- (viii) Prior to the admission of a student, his parents or guardians must satisfy the Director that they are willing and able to defray the expenses of the student at the School. These expenses are estimated to be not less than Rs. 822½ for each student living in native fashion, and Rs. 1,057½ in the case of those living in European fashion (*vide* Rule 21). Of these sums, parents or guardians must deposit with the Director, before the course commences, a sum of Rs. 141 in the case of native students and Rs. 188 in the case of European students, to meet the initial cost of uniform, books, instruments, stationery, and camp-equipage (*vide* Rule 18), and, in addition, Rs. 50 as caution-money.
- (ix) Local Governments may, on the recommendation of a Conservator or of the Director, and in exceptional cases, allow selected private students who have passed the entrance examination a monthly stipend, not exceeding Rs. 50, to assist them through the School course: provided that such selected private students previously execute an agreement binding themselves to serve the Local Government concerned (in the event of their obtaining the School certificate) for a period of not less than five years (*vide* Rule 17). Such monthly stipend may, in case of misconduct or unsatisfactory progress at the School, be reduced or altogether withdrawn at the discretion of the Director.
- (x) The names of those private students who succeed in obtaining the School certificate will be entered by the Director in a register to be kept for that purpose, and the Conservators of those circles, in which the non-stipendiary private students may severally desire or be willing to serve, will be addressed by him with the view of obtaining appointments for such students. The Conservators concerned will, for this purpose, be furnished with the original certificates already referred to in clause (i) of this rule, the School certificates, and such other useful information, more especially regarding the physical qualifications of the students, as the Director may be in a position to furnish.
- (xi) A list of private students, who may not succeed in obtaining appointments, will be forwarded by the Director to the Inspector-General of Forests, who will circulate the list amongst Durbars, Conservators, and other persons likely to be in need of the services of trained forest officials.
- (xii) The appointment to the service of Government of passed private students depends on the existence of vacancies in the various circles, and even a stipendiary student has no claim to such appointment.

13. Candidates in the Government Service, who may be deputed to the Upper Class, will ordinarily be either—

- (a) Forest Rangers who desire to qualify themselves for further promotion in their own or to a higher class; or
  - (b) other members of the Subordinate Forest Service (Foresters and other subordinate officials) similarly desirous of qualifying for promotion.
- (i) Forest Rangers may be deputed by Local Governments, provided the candidates are certified by the Conservator under whom they are serving to possess sufficient knowledge of English and general education and ability to enable them to profit by the course. Such officers may be above 25 years of age, and need not pass the entrance examination. While at the School they will draw the pay of their grade and the travelling allowances to which they may be entitled under the Civil Service Regulations.

(ii) Other officers of the Subordinate Service may be deputed by Local Governments, provided that—

- (a) they have been in that service for not less than three years;
- (b) they have passed the School entrance examination;
- (c) they are under 25 years of age;
- (d) they have executed the formal agreement referred to in Rule 17.

Such officers will, while at the School, draw the pay and travelling allowances of their grade in the service: provided that the total amount sanctioned to meet the cost of their training, inclusive of travelling expenses, shall not be less than Rs. 822½ in the case of students living in the native style, and Rs. 1,057½ in the case of students living in European fashion (*vide* Rule 21).

14. *Students deputed by Native States* may be admitted on the request of the State concerned: provided that—

- (a) they have passed the entrance examination of the School;
- (b) they have produced the certificates required for admission, specified in Rule 12 (i).

The Durbars of Native States sending students to the School shall, before the beginning of each term, or of each year if preferred, deposit with the Director a sum sufficient to meet the expenses of the students. This sum, for the whole course, must not be less than Rs. 822½ for students living in native fashion, and Rs. 1,057½ for those living in European fashion (*vide* Rule 21).

#### B.—Lower Class.

15. There are also three categories of students in the Lower Class—

- (a) Private students.
- (b) Students in Government service.
- (c) Students deputed by Native States.

The rules for admission to the Lower Class are the same as those detailed in Rules 12, 13, and 14, for admission to the Upper Class, with the following exceptions:—

- (i) Instead of the Entrance Examination, the candidate must furnish a certificate of having passed the Middle Class Examination in the North-Western Provinces and Oudh, or an equivalent standard in another province, as well as a certificate that he possesses a competent knowledge of Hindustani.
- (ii) The cost of training will not be less than Rs. 658 (*vide* Rule 21) for the whole course of 28½ months.
- (iii) The required deposit will be Rs. 94, and the caution-money Rs. 25.
- (iv) In the case of candidates who are already in the Subordinate Forest Service and below the rank of Ranger, the restrictions imposed by Rule 13 (ii) (a) and (c) may be specially relaxed under the orders of the Local Government.

#### C.—General.

16. No student of European or Eurasian extraction, not already in the permanent employment of Government or of a Native State, shall be admitted into the Forest School if he is married; nor shall any such student, whether in the permanent employment of Government or of a Native State, or not, marry whilst at the School or until he has joined a permanent appointment. A breach of this rule will render the student liable to dismissal from the School, or to forfeiture of any appointment in the Forest Service which may have been promised to him, or to which he may otherwise have a claim.

17. *Agreement and Security Bond.*—Officers of the Subordinate Service, deputed to the School by Local Governments under Rules 13 (ii) and 15, shall execute a formal agreement—the sureties for the fulfilment of which should be men of position and means—to continue in the Forest Service of the Local Government concerned for a period of not less than five years after passing out of the Forest School, and on such rates of pay as may be in accordance with the existing organisation of the Department. A breach of this condition will render the defaulter and his sureties liable for the refund of the entire cost of the student's education at the School. The agreement and security-bond shall be in the appended forms, and must be executed before the student is admitted to the School. The agreement will be signed by the student and, if he is a minor, by his father or guardian also; the bond by the student and two sureties. The amount of security to be taken will be—

For a Lower Class student	...	...	...	Rs. 600
" an Upper Class student	{ Native	...	...	750
	{ European	...	...	1,000

The agreement and security bond need not be stamped.

The same rule shall apply to private students who may be granted stipends under Rule 12 (ix), subject, however, to the proviso of Rule 12 (xii). Should any such student not be appointed to the Forest Service of Government at the end of his School course, his agreement and security-bond will be returned to him.

18. *Uniform, books, and camp allowances.*—The Director is authorized to make deductions from the pay of Forest Ranger students under Rule 13 (i), or of students of the Subordinate

Service under Rules 13 (ii) and 15, or from the stipends of private students under Rules 12 (ix) and 15, to the following amounts :—

Lower Class students	...	...	4 monthly, or	Rs. 94 in all
Upper " "	{ Native ...	...	6 "	141 "
	{ European ...	...	8 "	188 "

in order to meet the following items of initial expenditure, viz.—

	UPPER CLASS.		Lower class.
	Native.	European.	
1	2	3	4
	Rs.	Rs.	Rs.
Uniform and equipment ...	35	68	20
Books and instruments ...	60	60	34
Camp outfit ...	46	60	40
Total ...	141	188	94

The Director will charge off in his accounts such portions of the above as may be necessary from time to time to meet expenditure on the items mentioned, until the whole of the amounts are exhausted, after which the student will be required to pay in cash for articles supplied.

19. *Travelling allowances of private students in receipt of stipends.*—Students holding stipends from Local Governments under Rule 12 (ix) are not entitled to travelling allowance; but, as the tours entail greater expenditure in some months than in others, the Director is authorised to make a further monthly deduction from their stipends, of Rs. 5 from Upper Class Native students and Rs. 7 from Upper Class European students, and to disburse the amounts in the following manner :—

1	Native students.	European students.
2	3	
	Rs.	Rs.
Monthly travelling allowances ... { 15th April-15th June, 1st year } 4 8		
Or for 13 months ...	52	104
Special additional allowances for hill tours ...	30	22
" " for Punjab tour ...	35½	38½
Total ...	117½	164½

20. Should the Conservator of a Circle from which any Government student of the Subordinate Service is deputed to the School, under Rule 13 (ii), prefer it, he can, subject to the orders of his Government, authorize the Director to pay travelling allowance to such student at the rates given in Rule 19, instead of at the rates allowed by the Civil Service Regulations. And in the case of Lower Class Government students, deputed to the School under Rule 15, he may similarly authorize the payment of travelling allowance at the following rates, instead of the rates permissible under the Civil Service Regulations :—

Monthly travelling allowance at Rs. 4	...	Rs. 52
Special hill tour allowance	...	22
" Punjab tour allowance	...	20
Total	...	94

which rates are equivalent to a permanent travelling allowance of Rs. 4 per month for the whole course.

21. *Estimated expense of training.*—It has been calculated that, in addition to the amounts specified in Rule 18 for cost of uniform, books, &c., and camp-equipment, and in Rules 19 and 20 for travelling, the minimum monthly subsistence money for students comes to Rs. 20, Rs. 24, and Rs. 30, respectively, so that the minimum pay and travelling allowances of Government students under Rule 13 (ii), and the minimum stipends for stipendiary students under Rule 12 (ix), should not be less than Rs. 35 and Rs. 45, respectively, nor should the minimum pay and travelling allowances of Lower Class students (Rule 15) be less than Rs. 28. Thus, the minimum cost of training will be as follows:—

	Lower Class.	UPPER CLASS.	
		Native.	European.
1	2	3	4
Subsistence money	Rs. 20	Rs. 24	Rs. 30
Uniform, books, and camp outfit	4	6	8
Travelling allowance	4	5	7
Total per mensem	28	35	45
Or for the whole course of 23½ months	658	822½	1,057½

The same amounts should be taken as minima in calculating the allowances to be deposited on account of students from Native States under Rules 14 and 15, or provided by parents and guardians for the cost of training of private students.

### Section III.—Disciplinary Rules.

22. *Quarters.*—The Director will allot to students, on their arrival in Dehra, such quarters as may be available in the School buildings or in the houses rented by him for students' accommodation. The School quarters are tenable during the whole period of the students' course, and the rent is Rs. 2 monthly for each student, or Rs. 4 for each room. Students for whom there is no accommodation in quarters or in houses rented by the Director, or who may prefer it, can, with the permission of the Director, reside in the town in lodgings selected by themselves; but in that case the Director will accept no responsibility for the rent.

All students living in quarters or in the rented houses are expected to abide by such orders as the Director may issue from time to time for the purpose of ensuring cleanliness and sanitation.

No dogs are allowed in quarters, nor may dogs or horses be brought inside the School grounds.

Breakages of furniture, &c., in the quarters or School buildings must be paid for by the students. Students are responsible for the acts of their servants.

23. *Uniform.*—All students must wear the School uniform, which consists of a suit of khaki drill with white-metal buttons, and a grey turban of prescribed pattern, for the hot weather, and of khaki serge with similar buttons for the cold weather and camp. Those students who become members of the Dehra Dun Mounted Rifles are, however, permitted to wear the undress uniform of the corps, which also consists of a suit of khaki drill, of pattern similar to that of the School. Students who are Volunteers will wear, as head-dress, a brown shikar hat while at the School, and the regular corps helmet when on parade. Native students may dispense with turbans, or wear other head-dress, only with the Director's special permission. Uniform must always be worn inside the School building. It must also be worn in the School grounds up to 5 p.m.

24. *Uniform and Camp Equipment.*—The uniform of members of the Dehra Dun Mounted Rifles may be obtained through the corps staff; that of other students through the Store-keeper of the School, on the Director's order. As camp equipment each student requires—

- (1) A small tent, not larger than 10 feet x 8 feet.
- (2) A camp bed.
- (3) A small camp table.
- (4) A camp chair or "morah."

These articles are made at the School and issued at cost-price to students.

25. *Books and Instruments.*—The list of books and instruments required by each student will be published by the Director from time to time. The articles must be purchased from



the Director, who endeavours to obtain them of the best quality procurable, consistent with cheapness. No article will, however, be issued by the Store-keeper, except (a) on order of the Director, or (b) on cash payment.

Copies of the Forest Acts and Forest Code, as also surveying instruments and herbarium presses, are issued on loan, and students using them will be responsible for their safe custody and return.

26. *Leave*.—During the course of instruction, no student may leave Dehra without the written order of the Director; nor may students, while in camp, leave the camp headquarters without the written order of the Deputy Director or the Instructor in charge. Subsidiary rules regarding leave will be made by the Director from time to time.

27. *Holidays*.—During the rains term Saturday will usually be observed as a holiday or devoted to excursions. In camp it will ordinarily be a half-holiday. Such of the usual gazetted holidays as are allowed will be notified as such from time to time.

28. *Punishments*.—Students are liable to the following punishments:—

- (1) Reprimand by the teacher in class.
- (2) Reprimand by the Director or the Deputy Director at any time.
- (3) Reprimand before a meeting, convened by the Director, of not less than three School officers, one of whom must be either the Director or the Deputy Director. The proceedings of the meeting will be reported to the Conservator or the Native State deputing the student, or to his parents or guardians if he is a private student; and, if the meeting so decides, a note of them will be made on his final certificate.
- (4) The Director, acting with the consensus of the meeting referred to under (3), has power to inflict, in addition, a fine to the extent of one-third of the salary or allowances of the student for a period not exceeding three months.
- (5) The Director, acting with the consensus of a full meeting of the School officers presided over by himself, has power to dismiss any student for misconduct; and a student thus dismissed cannot be re-admitted to the School. The Director may remand any student who, in his opinion, is not sufficiently promising.

29. *Monthly Reports*.—A progress report on the work of each student will be issued monthly by the Director. It will record the number of marks obtained by the student at the last monthly examination, his application to his studies, and his conduct generally. It will be sent, for Government students or private students in receipt of stipends, to the Conservator of the Circle from which the student is deputed; for Native State students, to such person as the Durbar may direct; and for ordinary private students, to the parent or guardian concerned.

30. *Library*.—The books in the School Library are available for the use of students under such rules as the Director may make from time to time. Books of reference must be consulted in the library itself, and no books may be taken away except after application to the librarian and entry in a register.

31. *Museum*.—The Museum and Herbarium are also available for the use of students; but the objects in the Museum may not be handled or removed without the express permission of the Director or the Deputy Director. Permission to consult the Herbarium may be obtained from the Director or the Deputy Director, but the plants must be kept in their order as arranged, and no sheets removed or altered without permission.

32. *Athletic Sports*.—The gymnasium and the tennis courts will be available for the use of students during all recreation hours on week-days. Cricket and football may be played on the old parade ground. Students are recommended to join the School Athletic Club, the subscription to which is Rs. 4 yearly, and half-rates for those who do not play all the games.

*Forms of Agreement and Bond to be executed by students already in the service of, or in receipt of stipends from, Government, previous to entry into the Forest School, Dehra Dun.*

ARTICLES OF AGREEMENT made and entered into this      day of      18  
BETWEEN

of the first part      of  
son of the said      of the  
second part and the Secretary of State for India in Council hereinafter referred to as the Secretary of State of the third part. Whereby each of the parties hereto so far as the covenants and conditions on his own part are to be observed and performed covenants with the other of them as follows:—

1. The said      hereby of his own free will and consent and with the approbation and consent of the said      testified by the execution by him of these presents agrees with and to the Secretary of State his successors in office and assigns that he the said      shall well and faithfully pursue his studies at the Government Forest School, Dehra Dun,



and qualify for the Forest Service of the Government of British India or of any Local Government.

2. The said shall after completing his studies at the said Forest School and if so required to do serve the Secretary of State his successors in office and assigns in the Forest Department of the Government of British India or of any Local Government for a period of not less than five years and shall during the whole of such period diligently and efficiently do all acts and discharge all duties which may be required to be done by him in his capacity as an officer of the said Department.

3. The Secretary of State his successors in office and assigns hereby engages to educate the said at the Dehra Dun Forest School in all matters relating to forest service forest works and forest administration that it may be deemed necessary by the Director of the said School to teach the said

4. The Secretary of State shall pay the said during the whole period of his stay at the said School at and after the rate of Rs. per month and thereafter while the said shall faithfully and diligently serve as an officer of the said Forest Department at and after the rate of not less than Rs. per month and the said shall be entitled to all the rights and privileges in respect of pay pension and promotion accorded to officers of the said Department for the time by the Rules and Regulations of the Department.

5. Lastly, it is hereby agreed and declared that the Secretary of State his successors in office or assigns shall be at liberty to rescind this agreement on account of the negligence failure to attend to duty idleness or any insubordination or misconduct on the part of the said and to dismiss him from the said Forest School or the service of the said Department and the said

shall not be entitled to any of the privileges hereby imposed on him but the said or shall thereupon refund to the Secretary of State his successors in office and assigns the total cost including the monthly payments made to the said while at the said School incurred by the Secretary of State or his successors in office or assigns in respect of the education of the said at the said School. In witness whereof the said parties to these presents have hereunto set their respective hands and seals the day and year first above written.

KNOW all men by these presents that we  
of (principal obligor)

of and  
(sureties) are jointly and severally bound to the SECRETARY OF STATE FOR INDIA IN COUNCIL in the sum of Rs. to be paid to the said Secretary of State his successors in office or assigns or his or their certain attorney or attorneys for which payment well and truly to be made we bind ourselves our heirs executors and administrators and representatives and each of us binds himself his heirs executors administrators and representatives firmly by these presents sealed with our seals and dated this day of 18

Whereas the Secretary of State for India in Council for himself and his successors in office and assigns has engaged to educate the said at the Dehra Dun Forest School in all matters relating to forest science forest works and forest administration that it may be deemed necessary by the Director of the said School to teach the said and has also agreed to pay him during the whole period of his stay at the said School at and after the rate of rupees per month and whereas the cost per annum of such education without any such allowance being included is estimated to be Rs. which shall be taken to be the actual cost for the purpose of these presents and whereas in consideration of such education and pay to be given to the said as aforesaid by the said Secretary of State and his successors in office and assigns the said has agreed with the said Secretary of State his successors in office and assigns that he will after completing his studies at the said School and if required to do so serve in the Forest Department of the Government of British India for a period of not less than five years during the whole of which time he will diligently and efficiently do all acts and discharge all duties which may be required of him to be done in his capacity as an officer of the said Department. AND WHEREAS the said Secretary of State has also on his part agreed that the said

shall be paid for such service at and after the rate of not less than rupees per month and shall be entitled to all the rights and privileges in respect of pay pension and promotion accorded to officers of the said Department for the time being by the Rules and Regulations of the Department. And whereas for the purpose of securing and indemnifying the said Secretary of State his successors in office and assigns against all loss and damage which he or they might or may in any way suffer by reason of the said leaving without permission the service of the said Secretary of State his successors in office or assigns in less than five years after the completion of his studies at the said School and for the purpose also of securing the refund to the said Secretary of State his successors in office and assigns of the total cost including the monthly payments made to the said while at the said School incurred by the said

Secretary of State or his successors in office or assigns in respect of the education of the said \_\_\_\_\_ at the said School and in consideration of the payment and education so as aforesaid to be made and given to the said \_\_\_\_\_ at the said School and as one of the conditions of the admission of the said \_\_\_\_\_ to the said School it has also been agreed that the said \_\_\_\_\_ and the said \_\_\_\_\_ as his sureties should

execute the above-written bond subject to the condition hereinafter contained. Now the condition of the above-written bond or obligation is such that if the said \_\_\_\_\_ shall well and faithfully and diligently pursue his studies at the said School and qualify for the said forest service and shall also after completing his studies at the said Forest School and if so required to do serve the said Secretary of State his successors in office and assigns in the Forest Department of the Government of British India or of any Local Government for a period of not less than five years and shall during the whole of such period diligently and efficiently do all acts and discharge all duties which may be required to be done by him in his capacity as an officer of the said Department and if the said \_\_\_\_\_ and \_\_\_\_\_ or

either of them their or either of their heirs executors administrators and representatives shall well and truly indemnify the said Secretary of State his successors in office and assigns against all loss and damage which he or they might or may in any way suffer by reason of the said \_\_\_\_\_ giving cause for dismissal either while at the said School or while in the service of Government thereafter or of his leaving the service of the said Secretary of State his successors in office or assigns without permission in less than five years after the completion of the studies of the said \_\_\_\_\_ at the said School and if the said \_\_\_\_\_ and \_\_\_\_\_ or either of them their or either of their heirs executors administrators or

representatives shall also pay to the said Secretary of State his successors in office or assigns all sum or sums in any way expended paid or incurred by the said Secretary of State his successors in office or assigns in respect of the education of the said \_\_\_\_\_ at the said School then the above-written bond or obligation shall be void otherwise the same shall remain in full force and virtue. PROVIDED ALWAYS and it is hereby expressly agreed and declared that these presents shall be treated and considered as entered into under the orders of the Government of India for the performance by the said \_\_\_\_\_ and \_\_\_\_\_ and \_\_\_\_\_ of a public duty and an act in which the public are interested within the meaning of section 74 of Act IX of 1872 of the Legislative Council of India.

In WITNESS, &c.

*Notification by the Government of India, Finance and Commerce Department, No. 4760-S.R., dated Calcutta, the 29th November 1892.*

In exercise of the powers conferred by section 8 of the Indian Stamp Act (I of 1879), the Governor-General in Council is pleased to remit the duties payable on the agreements and security-bonds required to be executed, under the Rules to regulate appointments and promotions in the Provincial Forest Service, by students and their sureties previous to entry into the Forest School, Dehra Dun.

DISTRICT ROAD FUND.

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No. 5569R.C.

GOVERNMENT OF BENGAL—PUBLIC WORKS DEPARTMENT.

Road Cess.

*Dated Calcutta, the 6th November 1895.*

RESOLUTION.

READ—

Letter from the Accountant-General, Bengal, No. <sup>J.P.</sup><sub>698</sub>, dated 26th October 1895, submitting an abstract of receipts and expenditure of the several District Road Committees in Bengal for the quarter ending 30th June 1895.

RESOLUTION.—The Lieutenant-Governor directs that the accounts of the receipts and expenditure of the several District Road Committees in Bengal for the 1st quarter of the year 1895-96 be published in the *Calcutta Gazette*, and circulated to the officers concerned.

ORDER.—Ordered that a copy of this Resolution, together with a copy of the abstract of receipts and expenditure, be published in the Supplement to the *Calcutta Gazette*.

Ordered also that a copy of this Resolution, and of the abstract referred to, be forwarded for information to the—

Commissioners of the Rajshahi, Chittagong, Bhagalpur, and Chota Nagpur Divisions.

Superintending Engineers of the Northern and Western Circles,  
Inspector of Works, Eastern Circle.

Financial Department of this Government.

By order of the Lieutenant-Governor of Bengal,

F. J. JOHNSTONE,

*Secretary to the Government of Bengal.*







## WEATHER AND CROP REPORT.

For the week ending the 11th November, 1895.

**Burdwan.**—Rainfall nil. Weather hot. Prospects of *aman* rice crop continue bad. *Rabi* crops are being sown. Condition of cattle generally good. Fodder and water sufficient. Common rice sells at an average price of 15½ seers per rupee.

**Midnapore.**—Rainfall nil. Prospects of *aman* crop hopeful in Sadar and Contai. High land rice withering to some extent in Tamluk and suffering severely in Ghatal for want of rain. *Rabi* crops are being cultivated. Indigo is being sown. Sugarcane doing well. Fodder and water sufficient. Prices of common rice:—

	Srs.	
Sadar	16	} per rupee.
Contai	22	
Tamluk	15	
Ghatal	14 to 15	

**24-Parganas.**—Rainfall nil. Weather seasonable. Prospects of *aman* crop fair. Paddy on high lands in the Basirhat subdivision reported to be withering for want of rain. Sugarcane doing well. Sowing of *rabi* crops continues. Fodder and water sufficient. No cattle-disease. Rice sells at—

	Srs.	
Sadar	12 to 14	} per rupee.
Barasat	15	
Basirhat	16	
Diamond Harbour	16	

**Murshidabad.**—Rainfall nil. Weather seasonable. Condition of *kalai* good. Indigo and *rabi* crops are being sown. State of *aman* crop remains as before reported. Rain much wanted. Sugarcane and mulberry doing well. Fodder sufficient for cattle. Common rice sells at 16 seers per rupee.

**Khulna.**—Rainfall nil. Weather warm and close. Lands are being prepared for *rabi* crops. *Aman* doing well. Fodder and water sufficient. Prices of common rice:—

	Srs.	
Sadar	17 to 21	} per rupee.
Bagerhat	18	
Satkhira	16	

**Dinajpur.**—No rain. Weather seasonable. Prospects of standing crops good. Price of common rice 15 to 16 seers per rupee. No cattle-disease, nor any complaint for fodder or drinking water.

**Rangpur.**—Average rainfall .03. Weather seasonable. Prospects of standing crops good. Washing of jute and cultivation of land for winter crops going on. Common rice selling at 13 seers per rupee. Fodder sufficient.

**Pabna.**—Rainfall nil. Weather hot at day but cool at night. Prospects of *aman* paddy good at Sadar, but indifferent at Sirajganj. Fodder sufficient. Common rice sells at Sadar 16 seers and Sirajganj 15 seers per rupee.

**Dacca.**—Rainfall nil. Weather seasonable. Prospects of standing crops fair. No cattle-disease. Fodder available. Price of common rice 18 seers per rupee.

**Chittagong.**—Rainfall .04. Weather dry and occasionally cloudy. Harvesting of early *aman* in progress. Late winter rice suffering for want of rain. *Rabi* sowings commenced. Water and fodder sufficient. Common rice selling at 16 seers per rupee.

**Patna.**—No rain. Paddy has failed in some places in east of district and in Barh it is not progressing well for want of rain. *Rabi* and poppy being sown and said to be germinating well. Condition of cattle good. Fodder and water sufficient. Common rice selling from 16 to 21 seers per rupee.

**Gaya.**—No rain. Standing crops suffering. Sugarcane-pressing in progress. Price of common rice at Sadar 14 seers per rupee against an average of 16½ seers. Water and fodder sufficient.

**Champaran.**—No rain. *Rabi* being sown. Prospects of *aghani* good, but rain is much needed. Fodder and water for cattle sufficient.

**Darbhanga.**—No rain. Paddy on high land suffered severely for want of rain. *Rabi* sowings nearly completed, but rain badly wanted. Fodder for cattle sufficient. Prices rising.

**Bhagalpur.**—No rain. Weather rather warm for this time of the year. *Rabi* crops and paddy on high lands continue to suffer for want of rain. Outturn of sugarcane 16 annas. Indigo doing well. Fodder and water sufficient. Cattle-disease reported from thana Katuraia in the Banka subdivision. Common rice sells at 17 seers 10 chitaks per rupee.

**Purnea.**—Rainfall 20. *Rabi* crops doing well. More rain wanted for paddy. Cattle-disease reported from Tamajganj out-post. Fodder and water sufficient. Common rice sells at 18 to 21 seers per rupee.

**Cuttack.**—Rainfall nil. Weather seasonable. Harvesting of *laghu sarad* commenced. *Guru sarad* in ear. Condition of cattle good. Fodder sufficient. Common rice sells at—

				Srs. c.	
Cuttack	...	...	...	23 10	} per rupee.
Jajpur	...	...	...	28 12	
Kendrapara	...	...	...	31 8	
Banki	...	...	...	31 8	

**Hazaribagh.**—Rainfall nil. Weather seasonable. Prospects of rice crop are not as good as expected. *Rabi* prospects good. Fodder and water sufficient. Common rice selling at 12 to 14 seers per rupee.

**General Summary.**—With the exception of a light shower in Purnea, there was practically no rain in any of the reporting districts during the week. The prospects of the winter rice crop have suffered in many parts of the Province owing to the early cessation of the rains, and the general outturn is not expected to be so good as originally anticipated. The sowing of the spring crops is generally going on, but more rain is needed in parts of Bihar. Sugarcane is doing well. No cattle-disease is reported, except from parts of Bhagalpur and Purnea. The price of common rice generally continues steady, but shows a decided tendency to rise in several districts.

By order of the Lieutenant-Governor of Bengal,

REVENUE DEPARTMENT,  
The 12th November, 1895.

C. E. BUCKLAND,  
Secretary to the Government of Bengal.

## STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

STOCK IN HAND AS COMPILED OF—

NAMES OF WARE.	1st week of Nov. 1894	1st week of Dec. 1894	1st week of Jan. 1895	1st week of Feb. 1895	1st week of March 1895	1st week of April 1895	1st week of May 1895	1st week of June 1895	1st week of July 1895	1st week of August 1895	1st week of Sept. 1895	1st week of Oct. 1895	1st week of Nov. 1895.
Balishabata	Mds. 4,38,000	Mds. 3,64,000	Mds. 2,43,000	Mds. 4,16,000	Mds. 4,73,000	Mds. 7,35,000	Mds. 7,35,000	Mds. 6,40,000	Mds. 5,98,000	Mds. 4,28,000	Mds. 3,91,000	Mds. 3,40,000	Mds. 3,93,000
Uladanga	" 87,900	" 54,400	" 64,000	" 71,400	" 91,000	" 98,000	" 92,700	" 86,500	" 81,500	" 74,900	" 74,500	" 76,000	" 77,000
Chitpur, Golabara, Kuncu- gody, Hethola, and Guipi Ghat.	" 6,10,100	" 6,05,000	" 6,30,500	" 6,70,400	" 7,05,000	" 7,35,200	" 7,44,100	" 6,92,300	" 6,63,500	" 6,41,300	" 5,93,131	" 6,04,700	" 5,85,000
Pathuraghatta. Penta, and Jorabagan.	" 1,000	" 1,800	" 2,000	" 3,000	" 3,000	" 3,500	" 3,000	" 3,000	" 3,500	" 3,000	" 2,500	" 3,000	" 2,000
Tollygunge, Chetla, Kaddapore, and Munchikan.	" 1,44,700	" 1,34,300	" 1,56,000	" 1,90,300	" 2,76,500	" 3,05,000	" 3,03,700	" 2,68,300	" 2,45,700	" 2,26,300	" 2,07,200	" 2,10,200	" 1,93,300
21 Minor bazaar (estimated) ...	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000	" 2,40,000
Other retail shops, 3,100 in number (estimated).	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000	" 2,50,000
Baidyabati, Nowabganj, Bha- radwari, and Chanderdwar.	" 3,000	" 6,000	" 8,675	" 3,100	" 10,700	" 8,100	" 12,125	" 12,820	" 14,000	" 12,750	" 13,500	" 13,000	" 1,700
Total	17,50,350	15,51,300	16,03,175	18,52,100	21,07,200	23,63,800	23,67,635	21,93,900	20,94,253	18,76,150	17,70,800	17,30,400	16,44,650
On Railway premises on both sides of the river.	11,600 (on 3rd Nov. 1894.)	17,311 (on 3rd Dec. 1894.)	36,345 (on 3rd Jan. 1895.)	27,406 (on 3rd Feb. 1895.)	9,956 (on 3rd March 1895.)	16,491 (on 3rd April 1895.)	18,457 (on 3rd May 1895.)	7,703 (on 3rd June 1895.)	7,034 (on 3rd July 1895.)	4,136 (on 3rd August 1895.)	3,942 (on 3rd Sept. 1895.)	4,354 (on 3rd Oct. 1895.)	3,608 (on 3rd Nov. 1895.)
On boats un- headed ...	25,407 (1st to 3rd Nov. 1894.)	35,436 (1st to 3rd Dec. 1894.)	94,988 (2nd to 4th Jan. 1895.)	76,352 (2nd to 4th Feb. 1895.)	60,366 (1st to 3rd March 1895.)	63,354 (1st to 3rd April 1895.)	27,685 (1st to 3rd May 1895.)	33,580 (1st to 3rd June 1895.)	42,973 (1st to 3rd July 1895.)	32,619 (1st to 3rd August 1895.)	37,006 (1st to 3rd Sept. 1895.)	44,753 (5th to 7th Oct. 1895.)	30,979 (1st to 3rd Nov. 1895.)
By Canal returns	10,547 (1st to 3rd Nov. 1894.)	14,051 (1st to 3rd Dec. 1894.)	60,537 (2nd to 4th Jan. 1895.)	1,08,003 (2nd to 4th Feb. 1895.)	1,64,040 (1st to 3rd March 1895.)	29,350 (1st to 3rd April 1895.)	39,365 (1st to 3rd May 1895.)	19,530 (1st to 3rd June 1895.)	45,653 (1st to 3rd July 1895.)	40,953 (1st to 3rd August 1895.)	70,133 (1st to 3rd Sept. 1895.)	31,780 (5th to 7th Oct. 1895.)	35,637 (1st to 3rd Nov. 1895.)
Grand total of Stocks ...	17,90,946	16,18,733	17,95,006	21,24,919	23,41,633	24,89,305	24,53,013	23,30,741	21,50,163	19,03,640	18,96,990	18,30,304	17,16,900
Probable stock available for exportation by sea.	74 lakhs	64 lakhs	7 lakhs	102 lakhs	13 lakhs	144 lakhs	16 lakhs	113 lakhs	91 lakhs	89 lakhs	74 lakhs	64 lakhs	64 lakhs

C. E. BUCKLAND,  
Secy. to the Govt. of Bengal.STATISTICAL DEPARTMENT,  
The 11th November, 1895.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of October 1895.

	Inches.	Date.	Hour.
The mean pressure of the month ... ..	29.848		
The average pressure of October from 24 years' registers ...	29.832		
The highest pressure in the month ... ..	30.017	27th	10
The lowest pressure in the month ... ..	29.474	1st	16
The range of pressure ... ..	0.543		
The total number of hours of bright sunshine during the month	Hours. 221.7		
The maximum possible number of hours of sunshine ...	359.1		
The mean temperature of the month ... ..	79.3		
The average temperature of October from 24 years' registers ...	81.5		
The highest temperature in the month ... ..	91.3	6th	
The lowest temperature in the month ... ..	67.6	8th	
The range of temperature during the month ... ..	23.7		
The mean daily range of temperature ... ..	12.6		
The greatest range of temperature in one day ... ..	20.2	8th	
The mean humidity of the month ... ..	Per cent. 81		
The average humidity of October from 24 years' registers ...	79		
The mean vapour tension of the month ... ..	Inches. 0.801		
The average vapour tension of October from 9 years' registers...	0.854		
The mean cloud proportion of the month ... ..	3.59		
The average cloud proportion of October from 18 years' registers ... ..	4.01		
The total rainfall of the month ... ..	Inches. 2.79		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	2.60		
The average fall of October from 48 years' registers ...	5.61		
The greatest fall in 24 hours ... ..	1.44	2nd	
The number of rainy days in the month ... ..	Days. 7		
The average number of rainy days in October from 24 years' registers ... ..	10		
The mean maximum equilibrium temperature of solar radiation during the month ... ..	138.7		
The mean difference of sun and air temperatures ... ..	52.8		
The greatest sun temperature ... ..	150.7	10th	
The greatest excess of sun over air temperature ... ..	63.7	10th	
The mean temperature of the nocturnal radiation thermometer on woollen cloth ... ..	68.5		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground ... ..	4.8		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature ... ..	7.2	18th	
The mean movement of the wind per day ... ..	Miles. 66.0		
The greatest movement of the wind in one day ... ..	378.0	2nd	
The greatest movement of the wind in one hour ... ..	22.0	1st, 10 to 11 p.m.	

The number of hours with winds from each of the 8 points—  
N. 100, N.E. 80, E. 49, S.E. 62, S. 35, S.W. 77, W. 95, N.W. 52, Calm 194.  
The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore .008 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 0.8 lower; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0.6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

METEOROLOGICAL OFFICE, INDIA;  
Calcutta, the 11th November 1895.

J. H. GILLILAND,  
For Meteorological Reporter to the Govt. of India.





















**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS  
TAKEN IN ASSAM, FOR THE MONTH OF OCTOBER 1895.**

WEATHER during October, as throughout the monsoon season, has been distinguished by a comparative absence of rainfall. This deficient rainfall has been more marked in the northern half of the province, Bihar having received on an average only 16, and North Bengal 30 per cent. of the normal. In the other divisions the average fall has been between 80 and 90 per cent., except in East Bengal, where there has been a small excess of 7 per cent. Almost all the rain received in East Bengal fell during the first three days, when a severe cyclonic storm caused heavy rain.

Only two periods of rainy weather occurred during the month—the first at the beginning, when the storm just referred to passed from the north-west of the Bay across the Sunderbuns into East Bengal, and the second towards the end of the month, when a cyclonic storm in the south-west of the Bay caused a current of moist air to move northwards along the west coast. As the moist current advanced, heavy rain fell at all stations on the west coast, and cloudy rainy weather prevailed in Orissa, Chota Nagpur, and South-West Bengal for some days. The rainfall in these parts appears to have been maintained by a very shallow depression, which moved from the south of Burma over the north of the Bay and into Lower Bengal, arriving there about the same time as the moist current which had moved up the west of the Bay. The continuance of the rainfall in the south-western districts of the province of Bengal is difficult to account for, except on this supposition, because it was of daily occurrence for some time after all trace of the disturbance in the south-west of the Bay had disappeared.

Soon after the cyclonic storm in the early days of the month had disappeared, conditions became favourable for the withdrawal of the monsoon current from the north of the Bay. The large diffused low-pressure area characteristic of the change of seasons formed over the south of the Bay, and a moderate gradient developed from north to south. Following this rainfall became general on the Madras coast, and continued with but little interruption till near the end of the month.

At the same time fine settled weather prevailed in Bengal and over the north of the Bay, with comparatively low temperatures, especially at night, and an almost entire absence of rainfall. The two tables below show that the rainfall of the month occurred during the first few days and the last few days. They have already been published in the weekly reports, and are arranged as below for comparison.

Table showing in inches the average rainfall in the large divisions of the province as reported for the weeks ending 5th October and 2nd November :—

DIVISION.			Average rainfall of week ending 5th October.	Average rainfall of week ending 2nd November.	Total.
South-West Bengal	...	...	2.45	1.23	3.68
North Bengal	...	...	3.06	0.23	3.29
East Bengal	...	...	5.35	0.40	5.75
Bihar	...	...	0.90	0.13	1.03
Orissa	...	...	3.39	2.30	5.69
Chota Nagpur	...	...	0.66	1.70	2.36

Table showing the average rainfall in the large divisions as reported for the weeks ending October 12th, 19th, and 26th :—

DIVISION.		Average rainfall of week ending 12th October.	Average rainfall of week ending 19th October.	Average rainfall of week ending 26th October.	Total.
South-West Bengal	...	0.03	0.16	Nil.	0.19
North Bengal	...	0.05	0.11	0.01	0.17
East Bengal	...	0.25	Nil.	Nil.	0.25
Bihar	...	Nil.	Nil.	0.01	0.01
Orissa	...	0.40	0.02	0.60	1.02
Chota Nagpur	...	Nil.	0.25	Nil.	0.25

It will be seen from these tables that on neither of the two occasions of rainy weather did much rain fall in Bihar, and that on the latter occasion very little fell in North Bengal. On the other hand, the only amount of any importance shown in the second table was 0·6 inch in Orissa for the week ending 26th October. This was due to the moist current mentioned above having before the 26th caused moderately heavy rain in Orissa.

The north-east monsoon conditions were established over the province and the Bay about the 7th, and the fine weather which followed was accompanied by temperatures considerably lower than those which generally occur at that season of the year. There was, however, a rather important exception in the case of Chota Nagpur and Bihar, where mean temperature was frequently above the normal.

The higher temperatures in the western districts occurred during the day as shown in the following table, which gives the variation from the normal in mean maximum and minimum temperatures at representative stations:—

STATION.					Variation in mean maximum temperature.	Variation in mean minimum temperature.
Cuttack	...	...	...	...	—7°	—0·3°
Arrah	...	...	...	...	+1·4	—2·1
Hazaribagh	...	...	...	...	+0·7	—0·8
Rangpur	...	...	...	...	—1·7	—1·9
Comilla	...	...	...	...	—2·2	—3·0
Silchar	...	...	...	...	—1·6	—3·6

The area over which the days were warmer than the normal coincides with the area where westerly winds prevailed. In the west of Bihar the general direction was south-westerly, in Chota Nagpur westerly, and in Orissa north-westerly. In the centre and east of the province the prevailing direction was north-easterly, but at times when the pressure distribution was more than usually uniform, there were only light variable airs.

The higher day temperatures as compared with those prevailing at night may be accounted for by the greater absence of cloud than is usually the case in October. The clear skies gave a more free exposure to direct rays of the sun, and permitted a more rapid radiation of heat at night.

The disturbance in the early part of the month has already been referred to in the report for the month of September. At the end of that month there was a well-defined depression in the west of the Bay, which at first appeared to be moving in a westerly direction towards the Madras Coast. But as not unfrequently happens at the end of the monsoon season, the centre of the depression followed a curved path tending towards the east. On the 30th of September pressure changes were small at all the coast stations except in the south of Burma, where there was a rapid rise.

Winds from being north-easterly in the Circars had become north-west, and the centre of the disturbance appeared likely to cross the coast somewhere between False Point and Visagapatam. There was still no indication of the depth of the depression, as pressure readings were within 0·1 inch of the normal all round the coast except in the south of Burma, where there was excess of about 1 inch. On the 1st of October the centre was a little to the south-east of False Point, and it then appeared to be following a line curving to the east. As the depression approached the coast line, pressure fell rapidly—first at Gopalpur and False Point, and then over the whole of the north-west angle of the Bay and in Lower Bengal and Orissa. The rate of motion was much higher than usual, as the centre, from being to the south-east of False Point at 8 A.M. on the 1st, was near Saugor Island about 8 P.M. and Narayanganj on the following morning. The disturbance evidently developed after entering the north-west angle of the Bay, and also during the night of the 1st while passing over Lower Bengal. The fall of pressure at Narayanganj on the morning of the 2nd was more than half an inch, and the changes were large not only in South-West and East Bengal, but also in the north-east angle of the Bay as far south as Akyab.

Stormy weather accompanied the depression in its course over the Bay; and as the centre passed over the Sandheads, and very close to Saugor Island, the strength of the storm can readily be compared with what it was in East Bengal and the north-east angle of the Bay on the following morning. It may have been partly due to the curved path taken by the storm centre that the winds attained to the strength they had at the mouth of the Megna and inland as far as Narayanganj, but the depression appears also to have deepened, as the lowest pressure on the 1st was 29·443 inches at False Point, and at Narayanganj on the 2nd 29·264, while over an area extending from Mymensingh to Chittagong and from Jessore to Comilla the depth was as great as at False Point on the previous day.

As the depression was moving very rapidly to the east, it soon reached the hilly ground beyond East Bengal, and soon disappeared. On the morning of the 3rd the only trace of its

existence was a rather rapid fall of pressure at Sibsaigar and in Bihar, and a large defect over the whole of the province. The rise of pressure which followed the disturbance continued steadily till the end of the week, and by that time readings were everywhere above the normal.

The reading of the barometer reported from Barisal on the morning of the 2nd was so much lower than those of any of the other stations that it could not be accepted till enquiry had been made as to whether the observer who was officiating for a short time, had taken the reading with due care. In answer to the enquiry he stated that he had noticed the unusual depression of the barometer; that not only had he verified it several times himself, but that he had sent for the permanent observer, who vouched for its accuracy. The reading was 28·869 inches, and the fall from 8 A.M. of the previous day ·924 inch. Instead, therefore, of passing over Narayanganj, as appeared to be the case, the storm centre must have been at no great distance from Barisal. As the centre could not have been far from Saugor Island, as it passed to the west of the light-ships at the mouth of the Hooghly, the depth of the depression and the strength of the storm must have increased very greatly after crossing the coast. It is unfortunate that no record has been made of the strength of the wind at Barisal: the observer was unable to reach the anemometer.

The depth of the depression, as reported from Barisal, was confirmed by a report received from Comilla, that the lowest reading of the barometer taken there during the forenoon of the 2nd was below 29 inches.

During the passage of the depression across Lower Bengal heavy rain fell; but as it moved quickly, and, as always happens when a storm goes eastward, the weather moderated very rapidly, the quantity of rain was small compared with the intensity of the storm. It was only in East Bengal, where general heavy rain fell. On the 2nd falls varied from 1 to 7 inches over the whole of East Bengal, and heavy falls were recorded in Tippera on the 3rd, the heaviest being 4 at Comilla and 6 inches at Agartala. Rainfall had almost entirely ceased in the western districts on the 3rd, and very little fell anywhere after the 3rd.

Pressure rose steadily for some days after the 3rd; and as it soon began to fall in the south of the Bay, readings became highest in the north-east of the province, and the north-east monsoon distribution was established. From about the 7th, therefore, till towards the end of the month, fine settled weather prevailed over Bengal and the north of the Bay, and rainfall set in on the Madras Coast. The changes during that period were of but slight importance with the exception of those in temperature, and they have been already referred to.

The second disturbance of the month was of very short duration. It may have developed quickly or over an area too far south to affect weather at any of the observatories on the Madras Coast.

Heavy rain began on the 22nd as far north as Madras, and continued on the 23rd, Cuddalore reporting nearly 8 inches on that day. Squally weather began on the 24th, but was not felt to the south of Madras, the severity of the storm being chiefly confined to the part of the coast between Nellore and Cocanada. Within little more than twenty-four hours after the squally weather began at Madras, the depression crossed the coast between Masulipatam and Nellore. On the morning of the 25th the centre appeared to be about due east of Madras and to be moving in a north-westerly direction. On that day heavy rain was reported from Nellore, and a moderate fall had occurred as far north as Masulipatam. On the 26th the centre was well inland, and weather was rapidly moderating. The heavy rainfall on the 26th was between Masulipatam and Gopalpur, and lighter amounts were reported from Puri and Cuttack.

There was a considerable increase in the strength of the wind in the north-west angle of the Bay and in South-West Bengal, but that was of little importance as compared with the heavy rain, which gradually advanced northwards and ultimately became fairly general in Orissa, Chota Nagpur, and South-West Bengal.

The continuance of the cloudy rainy weather in the north of the Bay, Orissa, and Lower Bengal for quite a number of days after all trace of the disturbance from the south-west of the Bay had disappeared may be accounted for by a shallow depression which passed across the north of the Bay from the Burmah coast and into Bengal. While on the 27th pressure was rising slowly to moderately on the west coast and in Bengal, a slow fall prevailed in Burmah and the east of the Bay. This change extended north-westward on the 28th, and there was a brisk fall over the greater part of Lower Bengal. At that time the pressure distribution was very nearly normal, but there was a faint cyclonic circulation of winds in the central and western districts, and heavy rain fell as far north as Raniganj. Pressure continued to fall on the 29th, slowly everywhere, but rather more quickly in Burmah than in the north of the Bay. Gradients became more regular from north to south, and the cloud began to clear away in Lower Bengal. Rainfall was much less general, and with the brisk rise of pressure on the 30th it entirely stopped, except in Orissa, where scattered showers fell almost till the end of the month.

Pressure for the month is very nearly normal, differences varying from defect of ·01 inch in the west of Bihar and part of East Bengal to excess of ·014 inch in South-West Bengal. Except when the depression was crossing the Sunderbuns and East Bengal on the 1st and 2nd, changes were never large, nor did readings differ much from the normal. The



large changes during the existence of the storm have been already referred to, the fall on the approach of the centre being very little short of an inch. The small defect in pressure for the whole month in East Bengal is due to the very low readings reported on the 2nd by all stations in that part of the province.

*Temperature.*—During the two periods of disturbed weather at the beginning and end of the month, the cloudy weather caused a large fall in day temperatures. At other times maximum readings were usually above the normal. The nights were cooler than usual at the time of the year almost without interruption. As stated above, mean maximum temperature for the whole month is below the normal except in Chota Nagpur and the west of Bihar, and mean minimum temperature is below the normal everywhere. Mean daily temperature is below the normal in the large divisions by amounts varying from a third of a degree in Chota Nagpur to 2°·3 in Assam.

*Rainfall.*—Very little rain fell except during the first three days, and from the 26th to the end of the month. Owing to the heavy falls which then occurred in the southern districts, the mean difference from the normal is not large, but, as on the second occasion, very little fell in North Bengal and on neither occasion in Bihar. The falls in both these districts are much below the normal. The total fall in Bihar is only ·55 inch as compared with a normal fall of 3·44 inches; in North Bengal 1·32 as compared with 4·42 inches. Defect in Orissa is ·68, in South-West Bengal ·64, and in Chota Nagpur ·37 inch, while in East Bengal there is excess of ·36 inch.

Many of the Bihar stations have received not more than ·3 inch, and with the exception of a few stations in the Darjeeling hills, the falls are rarely more than 1 inch over the whole of the north of the province. Over a belt of country running east and west across the central districts from Chota Nagpur to East Bengal, the falls are between 1 and 3 inches. Further south they vary between 3 and 5 inches except in the southern half of East Bengal and on the Orissa coast, where the falls are between 5 and 10 inches.

Falls are in excess of the normal in the southern half of East Bengal, and over Orissa and the adjacent part of Chota Nagpur, excess ranging up to 2 inches in Orissa and to 5 inches in East Bengal. Over the rest of the province falls are deficient by amounts increasing towards the north, the greatest being a little over 4 inches in parts of the Dinajpur, Rangpur, Bogra, Mymensingh, Bhagalpur, and Saran districts. Over the whole of the northern half of the province defect varies from 2 to 4 inches.

The following table gives a comparison between the actual monthly and total rainfall and the normal rainfall of the province up to the end of October in the same form as has been employed in the previous monthly abstracts of the present year. The figures represent the ratio of the rainfall of each month of the present year to the normal rainfall expressed as a percentage. The table thus gives a condensed summary of the rainfall data of the year for each meteorological division. The first ten columns give the percentage amount of rainfall received in each month, and the last column the percentage rainfall of the whole period from the 1st of January to the end of October:—

METEOROLOGICAL DIVISIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	Actual rainfall of first ten months of 1895 expressed as a percentage of the normal fall for the period.
South-West Bengal ...	44	9	29	111	86	82	67	67	67	85	72
North Bengal ...	27	5	49	129	91	43	165	87	89	30	89
East Bengal ...	11	1	38	140	133	47	81	90	75	107	81
Bihar ...	71	88	34	129	70	72	120	102	77	16	89
Orissa ...	49	101	29	194	46	212	79	116	90	89	109
Chota Nagpur ...	66	52	71	418	70	109	98	67	78	88	87

The following table gives full data for the comparison of the actual and normal rainfall of the month of October in all districts of the province. The figures are obtained in the manner explained in previous monthly summaries. The first column gives the average district rainfall as determined from the rainfall observations of the past 15 years; the second column gives the actual district rainfall as determined from the actual weighted rainfall of the month at the reporting stations in the district; the third column expresses the ratio of

the actual district rainfall to the normal as a percentage, and the fourth the same information in a slightly different form :—

Percentage Table for October 1895.

DIVISION	DISTRICT.	Normal district rainfall for October.	Actual district rainfall for October 1895.	Percentage of actual to normal rainfall.	Percentage excess (+), defect (—).
South-West Bengal	Burdwan	4.16	3.26	78	— 22
	Birbhum	3.41	1.98	58	— 42
	Bankura	3.77	3.34	89	— 11
	Midnapore	5.26	4.60	86	— 14
	Hooghly	4.07	4.14	102	+ 2
	Howrah	3.65	2.24	61	— 39
	24 Parganas	4.65	3.85	83	— 17
	Calcutta	4.42	2.79	63	— 37
	Nadia	4.42	2.79	72	— 28
	Murshidabad	4.17	3.00	72	— 28
	Jessore	4.37	1.58	36	— 64
	Khulna	4.46	5.37	121	+ 21
	Rajshahi	4.62	9.15	202	+102
	Dinajpur	4.63	1.53	34	— 66
North Bengal	Rangpur	3.44	0.36	11	— 89
	Jalpaiguri	5.60	1.66	30	— 70
	Darjeeling	6.96	0.40	6	— 94
	Kuch Bihar	4.99	2.65	53	— 47
	Rangpur	4.46	1.25	28	— 72
	Bogra	4.34	0.77	18	— 82
	Pabna	4.43	1.92	43	— 57
	Dacca	4.61	4.35	94	— 6
	Mymensingh	5.32	1.68	31	— 69
	Faridpur	4.24	5.58	131	+ 31
	Backergunge	5.62	8.40	149	+ 49
	Tipperra	5.26	7.54	143	+ 48
	Noakhali	7.37	5.31	72	— 28
	Chittagong	6.60	8.76	133	+ 33
East Bengal	South Lushai Hills	8.25	6.29	77	— 23
	Patna	2.97	0.53	19	— 81
	Gaya	2.68	0.19	7	— 93
	Shahabad	3.19	0.38	12	— 88
	Saran	3.74	0.34	9	— 91
	Champaran	3.46	0.10	3	— 97
	Muzaffarpur	3.03	0.81	27	— 73
	Darbhanga	2.72	0.53	19	— 81
	Monghyr	3.13	0.40	13	— 87
	Bhagalpur	3.50	0.28	7	— 93
	Purnea	3.43	0.50	15	— 85
	Malda	3.62	0.32	9	— 91
	Sonthal Parganas	3.62	1.42	40	— 60
	Cuttack	5.69	6.09	108	+ 8
Orissa	Balasore	5.36	3.88	72	— 28
	Puri	7.42	8.61	116	+ 16
	Hazaribagh	3.26	4.59	140	+ 40
	Lohardaga	2.68	1.52	57	— 43
Chota Nagpur	Palamau	2.31	0.88	31	— 69
	Manbhum	3.68	3.86	106	+ 6
	Singbhum	2.94	3.23	110	+ 10

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the month of October 1895 :—

the six meteorological divisions of the province for the month of

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.						
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 16th October 1895.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
South-West Bengal	94.8	61.9	87.9	71.9	80.0	-1.2	3.69	4.33	-0.64	3.85	5.23	-1.37	1.31	1.70
North Bengal	91.7	60.3	85.8	70.0	78.0	-1.5	1.88	4.43	-3.10	2.65	4.51	-1.86	0.55	1.44
East Bengal	91.8	60.5	85.9	71.1	78.6	-1.9	5.79	5.43	+0.36	3.83	6.07	-2.19	0.40	1.83
Bihar	96.0	55.4	86.4	68.7	78.6	-1.0	0.55	3.44	-2.80	1.31	3.21	-1.90	0.15	0.98
Orissa	94.2	66.8	87.7	74.0	80.9	-0.6	5.46	6.16	-0.68	5.88	6.76	-0.90	2.60	2.50
Chota Nagpur	92.9	58.0	85.1	66.6	76.8	-0.3	2.60	3.97	-0.37	3.73	4.20	-0.47	1.82	0.51
Assam	94.5	61.4	84.6	69.2	76.9	-2.3								

\* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 12th November 1895.

C. LITTLE,  
Offg. Meteorological Reporter to the Govt. of Bengal.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of October 1895.

The mean pressure at 10 A.M. during the month	...	Inches.	29.910	Date.	
The mean temperature at 10 A.M. during the month	...	°	84.0		
The highest temperature during the month	...	°	93.3	6th.	
The lowest temperature during the month	...	°	67.8	8th.	
The absolute range of temperature during the month	...	°	25.5		
The mean daily range of temperature during the month	...	°	15.0		
The greatest range of temperature in one day during the month	...	°	22.8	8th.	
The mean 10 A.M. humidity during the month	...	%	68		
The mean 10 A.M. vapour tension during the month	...	Inches.	.789		
The total rainfall of the month	...	Inches.	3.14		
The greatest fall in 24 hours	...	Inches.	1.32	2nd.	
The number of rainy days in the month	...	Days.	6		

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,

The 1st November 1895.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 3rd to 9th November 1895.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1895.		Inches.	°		°	°	°	°	Inches.	°	%	Inches.
November	3rd	29.946	75.1	85.8	21.4	64.4	80.6	69.0	.539	61.1	52	Nil
"	4th	.975	76.6	86.3	19.4	66.9	81.1	72.0	.635	65.8	58	Nil
"	5th	.975	77.1	87.3	20.5	66.8	82.6	74.5	.729	69.8	65	Nil
"	6th	.995	78.2	87.5	18.6	68.9	82.3	69.0	.517	59.9	46	Nil
"	7th	30.027	78.3	86.8	17.0	69.8	82.4	75.0	.748	70.5	67	Nil
"	8th	.014	79.0	85.3	12.7	72.6	82.6	75.0	.746	70.5	67	Nil
"	9th	.004	80.3	85.7	10.9	74.8	80.6	74.8	.768	71.3	73	Nil

The mean 10 A.M. pressure of the seven days	...	Inches.	29.991
The mean temperature of the seven days	...	°	77.8
The extreme variation of temperature	...	°	23.1
The maximum temperature	...	°	86.4

The mean 10 A.M. relative humidity of the seven days	...	%	61
--	-----	---	----

The total fall of rain from 3rd to 9th November 1895	...	Inches.	Nil
--	-----	---------	-----

The daily mean temperatures are the crude means of maximum and minimum temperatures.

METEOROLOGICAL OFFICE, INDIA,

J. H. GILLILAND,

The 11th November 1895.

For Meteorological Reporter to the Govt. of India.













SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, FOR THE WEEK ENDING, 8 A.M., SATURDAY  
THE 9TH OF NOVEMBER 1895.

FINE settled weather has prevailed over the province throughout the week, and also in the west of the Bay, but in the east conditions have been less settled. A large diffused low pressure area has been lying over the Bay, and though pressure-changes at the coast stations have not been of much importance, strong winds sprang up at Diamond Island and continued for some days. Judging by the strength of the wind in that part of the Bay and the very rough sea, a depression of limited extent appears to have formed not far from Diamond Island, within the large diffused low pressure area shown by the coast observations. From some unknown cause it disappeared before its effects were felt on any other part of the coast, and whether it ever existed or not is purely hypothetical.

Pressure has been considerably higher than usual in the south of the Bay throughout the week, and over Bengal there has generally been a small excess. Changes were upwards in the early part of the week, at times with moderate rapidity, but excess was seldom more than .1 inch. Towards the end, when the depression in the neighbourhood of Diamond Island became diffused, the barometer fell slowly everywhere. Besides the strong winds and the rough sea, a good deal of rain appears to have fallen in the part of the Bay where the squally weather developed. The only heavy fall, however, reported was about 2 inches at Tavoy.

The most important change has been the increase of temperature. For some weeks past mean daily temperature has been steadily below the normal, and on the first day of this week there was still considerable defect in all districts and over the north of the Bay. On the 4th it was rising rather quickly, the change appearing to come from the north of the Province, as on this day there was excess in North Bengal, Bihar and Assam, varying up to nearly 4° at Jalpaiguri, while in the southern districts there was still a moderate defect. On the 5th the area of relatively high temperature had extended over the whole province and the north of the Bay. At the same time there had been a considerable fall in Burma and Madras, and readings became low over the south of the Bay. The excess, which became general on the 5th, gradually increased towards the end of the week, when it was as much as 5° in parts of Lower Bengal and Bihar.

Though only a few scattered showers have fallen, weather was very cloudy in the north of the Bay and in Lower Bengal on the 8th and 9th. This was due to the small storm which had developed in the east of the Bay having diffused over a wide area. The slightly unsettled weather consequent on this change was of only short duration, and by the end of the week conditions were settled over the whole area.

Pressure fell on the first day of the week. It then rose till towards the end, when it fell every where except in Orissa. Mean pressure for the week is above the normal at all stations, but by only small amounts ranging up to .03 inch in North Bengal.

Temperature.—From being 2° to 3° below the normal mean, temperature has increased to 5° above the normal in places. As there has been excess throughout the week, except near the beginning, means for the week are all in excess, the difference varying from 0°·7 in East Bengal to 2°·2 in Bihar.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending Saturday, the 9th November 1895.

	Normal mean maximum temperature for the week ending 9th November.	Actual mean maximum temperature for the week ending 9th November 1895.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 9th November.	Actual mean minimum temperature for the week ending 9th November 1895.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 9th November.	Actual mean daily temperature for the week ending 9th November 1895.	Variation of actual mean from the normal.
Cuttack	85·3	86·7	+0·9	70·1	70·3	+0·2	78·0	78·6	+0·6
Calcutta	82·7	83·8	+1·1	68·3	68·3	+0·0	73·5	76·5	+1·0
Chittagong	83·8	84·6	+1·0	68·4	67·3	-1·0	76·6	76·2	-0·4
Burdwan	84·0	84·9	+0·9	67·0	68·2	+1·2	76·0	76·6	+0·6
Patna	83·8	85·2	+1·4	64·1	67·0	+2·9	74·0	76·1	+2·1
Gaya	84·8	87·7	+2·9	63·5	66·0	+2·5	74·1	76·9	+2·8
Purnea	85·7	88·0	+2·3	62·2	64·3	+2·1	73·0	74·7	+1·7
Hazaribagh	85·6	88·4	+2·8	61·1	63·6	+2·5	72·9	74·7	+1·8
Darjeeling	86·2	86·0	-0·2	43·2	45·2	+2·0	49·7	50·6	+0·9

Rainfall.—Only a few light scattered showers, chiefly in East and North Bengal, have been reported. East Bengal on an average has received nearly a tenth of an inch, and the other districts .02 inch or less.

The following table gives the summary of the temperature and rainfall data of each of the six meteorological divisions of the province for the week ending Saturday, the 9th of November 1895 :—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th October 1895.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
South-West Bengal	87.3	65.3	84.9	67.9	76.4	+0.9	Nil	0.13	-0.13	0.30	0.23	-0.23	Nil	0.31	1.31	1.36
North Bengal	86.9	63.3	85.6	65.9	74.7	+1.3	0.01	0.10	-0.09	0.04	0.13	-0.09	0.01	0.11	0.36	1.54
East Bengal	87.3	63.6	84.3	66.5	76.4	+0.6	0.08	0.34	-0.16	0.20	0.31	-0.11	0.08	0.48	0.68	2.68
Bihar	80.3	56.9	85.7	66.0	75.6	+2.2	0.01	0.07	-0.06	0.03	0.10	-0.07	0.01	0.07	0.15	1.04
Orissa	82.2	62.7	85.9	66.3	77.2	+0.9	0.04	0.37	-0.23	0.13	0.04	-0.51	0.01	0.08	2.94	3.32
Chota Nagpur	87.7	60.4	80.0	62.7	72.6	+1.6	Nil	0.10	-0.10	0.00	0.28	-0.26	Nil	0.16	1.32	0.79

\* Dalkangaj not included.

METEOROLOGICAL OFFICE, BENGAL,  
The 12th November 1895.

C. LITTLE,  
Offg. Meteorological Reporter to the Govt. of Bengal.





## IRRIGATION DEPARTMENT, BENGAL.

*Abstract statement showing assessed Tollage on Canals in Bengal classed as Major Works for the month of September 1895, as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1895-96.			TOLLAGE, 1894-95.		
	During the month.		To end of the month.	During the month.		To end of the month.
1	2	3	4	5		
<i>Orissa Circle.</i>	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
Taldanda Canal System	1,092 10 6	9,472 11 3	611 14 8	8,566 2 9		
Kendrapara ditto	8,499 8 8	42,172 3 0	5,949 7 0	25,517 7 10		
High Level Canal, Range I	1,339 8 3	5,256 13 6	936 5 3	3,386 13 9		
Ditto, " II	270 6 4	1,148 10 4	243 4 0	849 9 5		
Ditto, " III	149 11 0	711 9 0	149 8 0	513 4 3		
Jajpur Canal ...	50 15 0	189 12 3	58 9 0	191 8 3		
Total Orissa Circle ...	11,402 11 9	58,951 11 4	7,998 15 11	39,024 14 3		
<i>South-Western Circle.</i>						
Midnapore Canal ...	11,514 15 6	61,917 14 3	10,048 14 9	60,000 9 3		
Hijili Tidal Canal ...	7,725 8 6	43,107 6 6	4,621 15 0	37,213 12 3		
Total South-Western Circle ...	19,240 8 0	1,05,025 4 9	14,670 13 9	97,214 5 6		
<i>Sone Circle.</i>						
Patna Canal System ...	1,556 3 0	11,776 6 4	1,069 2 0	10,427 13 3		
Arrah ditto ...	1,475 5 9	9,767 12 9	975 7 6	11,524 2 3		
Buxar ditto ...	664 13 6	5,967 10 0	590 14 9	4,189 7 3		
Total Sone Circle ...	3,696 6 3	27,511 13 1	2,635 8 3	26,141 6 9		
GRAND TOTAL ...	34,339 10 0	1,91,488 13 2	25,305 5 11	1,62,380 10 6		

## Government Transport Service.

CANAL.	TOLLAGE, 1895-96.						TOLLAGE, 1894-95.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.
	1	2	3	4	5	6	7	8	9	10	11	12
Orissa Circle.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.
High Level ...	2,806	...	2,443 4 8	10,751	2,907	9,732 5 9	1,991	2,661	1,900 14 10	6,435	8,042	6,515 15 5
Total Orissa Circle ...	2,806	...	2,443 4 8	10,751	2,907	9,732 5 9	1,991	2,661	1,900 14 10	6,435	8,042	6,515 15 5

## Assessed Tollage Receipts.

CANALS.	EARNINGS, 1895-96.			EARNINGS, 1894-95.		
	During the month.		To end of the month.	During the month.		To end of the month.
1	2	3	4	5		
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
Orissa Canals ...	13,846 0 5	68,684 1 1	9,899 14 9	45,543 13 8		
Midnapore Canal ...	11,514 15 6	61,917 14 3	10,048 14 9	60,000 9 3		
Hijili Tidal Canal ...	7,725 8 6	43,107 6 6	4,621 15 0	37,213 12 3		
Sone Canals ...	3,696 6 3	27,511 13 1	2,635 8 3	26,141 6 9		
Total ...	36,782 14 8	2,01,221 2 11	27,206 4 9	1,68,899 9 11		

CALCUTTA,  
The 12th November 1895.

O. C. LEYS,  
Under-Secy. to the Govt. of Bengal.

## IRRIGATION DEPARTMENT, BENGAL.

*Abstract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of September 1895, as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1895-96.		TOLLAGE, 1894-95.	
	During the month.	To end of the month.	During the month.	To end of the month.
1	2	3	4	5
	Rs.    A. P.	Rs.    A. P.	Rs.    A. P.	Rs.    A. P.
Calcutta and Eastern Canals ...	25,905    9    9	1,23,866    6    0	25,408    13    6	1,08,766    5    3
Tolly's Nala ...	7,851    9    6	42,204    15    9	8,026    11    6	36,710    2    3
Total ...	33,757    3    3	1,66,071    5    9	33,435    9    0	1,45,476    7    6
Orissa Coast Canal ...	6,253    2    6	41,082    4    0	4,632    15    9	28,579    12    3
Nadia Rivers ..	20,192    15    6	80,956    4    6	*22,507    4    0	*81,252    14    0
GRAND TOTAL ...	60,203    5    3	2,88,109    14    3	60,575    12    9	2,55,309    1    9

\* Inclusive of Rs. 753-6-8 omitted from the statement for September 1894.

CALCUTTA,  
The 12th November 1895.

O. C. LEES,  
Under-Secy. to the Govt. of Bengal.

## CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 9th November 1895, as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 9TH NOVEMBER 1895.			WEEK ENDING SATURDAY, THE 10TH NOVEMBER 1894.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	618	1,03,450	1,731	367	44,545	717
Jute ...	588	1,84,675	3,190	302	1,02,376	1,736
Firewood ...	189	96,650	1,427	98	62,150	961
Other articles ...	878	2,00,925	3,003	684	1,66,240	2,521
Total ...	2,273	5,85,700	9,351	1,451	3,75,310	5,925

## EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the five weeks ending 28th September 1895, as compared with the same period of 1894.

STAPLES.	1894.		1895.		INCREASE.		DECREASE.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
Coal & Coke carried for the public and foreign railways	57,11,802	7,90,955	66,73,621	10,09,019	9,61,818	2,09,064	...	...
Cotton, raw	20,026	24,838	66,597	43,931	37,571	24,093	...	...
Cotton, manufactured—								
1.—Twist & Yarn, European	8,600	8,412	5,413	5,851	...	...	3,187	2,561
2.—Ditto Indian	37,733	18,014	36,130	21,291	...	8,277	1,603	...
3.—Piece-goods—European	1,44,122	1,47,864	1,34,321	1,33,934	...	...	9,801	13,930
4.—Ditto—Indian	21,902	12,721	23,603	14,337	1,701	1,616	...	...
Drugs and chemicals—								
1.—Intoxicating other than opium	427	204	577	331	150	127	...	...
2.—Non-intoxicating	9,766	7,785	12,716	9,586	2,950	1,800	...	...
Dyes and tans—								
1.—Indigo	8,445	1,030	4,513	1,342	1,468	312	...	...
2.—Myrabolams	7,073	1,385	3,417	1,010	...	...	3,656	375
3.—Cutch	3,374	1,843	3,098	1,546	...	...	276	...
4.—Turmeric	9,481	7,476	8,327	5,847	...	...	1,154	1,089
5.—Aniline dyes	202	156	95	83	...	...	107	75
6.—Others	246	243	440	354	44	111	...	...
Grain & Pulse—								
1.—Wheat	6,35,405	2,72,285	4,60,702	1,02,540	...	...	1,75,643	1,09,78
2.—Rice in the husk	94,335	10,754	44,322	7,770	...	...	50,013	2,94
3.—Rice not in the husk	4,43,227	71,203	4,43,377	83,239	...	12,036	460	...
4.—Jawar and bajra	1,12,406	45,172	63,546	10,858	...	...	48,860	34,314
5.—Gram & pulse	6,00,098	2,33,085	6,05,092	1,56,615	...	...	64,066	77,679
6.—Others	1,95,179	51,068	1,63,031	20,352	...	...	32,145	21,716
Hides and skins—								
1.—Hides of cattle	27,664	13,160	63,840	36,318	36,195	23,158	...	...
2.—Skins of sheep, &c.	18,888	7,021	19,036	10,824	148	3,803	...	...
Horns	2,234	1,777	2,014	1,028	...	...	220	79
Jute—								
1.—Raw	48,407	11,327	1,03,956	19,141	55,549	7,814	...	...
2.—Gunnybags and cloth	65,691	40,327	56,300	32,056	...	...	10,181	5,271
Lac—								
1.—Stick	36,305	12,908	38,369	14,804	2,064	1,896	...	...
2.—Shell	21,722	17,050	27,084	20,505	5,362	3,455	...	...
Leather, Manufactured	8,547	10,680	5,882	7,151	...	...	2,465	3,529
Liquors—								
1.—Beer	25,232	9,886	17,070	9,658	...	...	7,563	22
2.—Spirits	1,730	2,031	2,122	2,251	392	210	...	...
3.—Wines	2,036	3,762	2,771	5,456	735	1,694	...	...
Metals—								
1.—Copper, unwrought	5,740	6,731	335	208	...	...	5,411	6,403
2.—Brass, unwrought	3,500	1,617	3,065	1,940	...	338	535	...
3.—Copper, wrought	1,428	997	1,235	744	...	...	193	...
4.—Brass, wrought	15,067	7,906	17,458	8,084	2,391	128	...	...
5.—Iron	1,08,271	53,183	1,04,542	64,639	36,271	11,466	...	...
6.—Others	10,450	7,532	10,436	8,151	...	...	14	...
7.—Zinc & spelter	5,030	3,800	3,064	2,007	...	...	1,965	1,533
Oils—								
1.—Kerosine	1,21,456	60,416	1,78,940	76,938	57,483	16,522	...	...
2.—Castor	4,338	1,471	7,335	2,470	1,897	909	...	...
3.—Coconut	5,437	1,736	4,808	1,587	...	...	630	140
4.—Others	11,209	5,223	16,510	10,600	5,301	5,377	...	...
Oil-seeds—								
1.—Linseed	2,19,443	65,548	1,15,702	20,180	...	...	1,03,741	45,363
2.—Rape and mustard	1,24,507	47,390	1,24,941	56,074	434	8,708	...	...
3.—Til or jinjili	8,092	2,398	3,182	616	...	...	6,480	1,577
4.—Poppy	8,750	2,750	20,790	3,309	12,044	559	...	...
5.—Earthnuts	102	36	11	2	...	...	91	34
6.—Castor	57,496	15,645	51,444	11,973	...	...	6,042	3,675
7.—Others	56,709	18,907	7,756	2,166	...	...	49,004	16,901
Opium	790	685	1,000	1,123	309	558	...	...
Paper and pasteboard	19,707	10,073	21,981	12,933	2,274	2,861	...	...
Provisions—								
1.—Ghee	43,943	43,323	39,055	36,490	...	...	4,888	6,827
2.—Dried fruits and nuts	26,196	9,851	20,185	9,521	...	...	6,011	300
3.—Others	47,038	17,908	29,820	29,833	11,782	11,925	...	...
4.—Potatoes	54,101	15,670	77,727	28,473	23,626	12,803	...	...
Railway plant & rolling stock carried for the public & foreign railways—								
1.—Locomotive engines & tenders & parts thereof	2,330	1,955	1,023	501	...	...	416	1,434
2.—Carriages & trucks & parts thereof	1,406	56	5,021	1,978	3,615	1,923	...	3,301
3.—Steel rails & fish plates	10,482	2,301	...	...	...	...	10,482	...
4.—Sleepers & keys of steel & cast iron	...	...	...	...	...	...	23,032	4,907
5.—Other sorts	24,918	7,093	15,886	2,160	...	...	...	...
Salt	5,33,914	1,01,940	7,02,184	1,23,605	1,68,270	21,655	...	...
Saltpetre, &c.—								
1.—Saltpetre	41,271	15,632	50,802	22,153	9,531	6,321	10,396	2,806
2.—Other saline substances	39,524	11,303	29,128	8,407	...	...	...	...
Silk, raw—								
1.—Foreign	...	...	...	...	...	...	619	35
2.—Indian	2,340	1,377	1,721	1,092	...	...	...	...
Silk piece-goods—								
1.—Foreign	19	57	...	...	...	...	19	57
2.—Indian	264	401	380	311	25	...	...	...

STAPLES.	1894.		1895.		INCREASE.		DECREASE.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
<b>Spices—</b>								
1.—Betelnuts	19,108	15,758	16,060	13,867	488	544	2,448	1,869
2.—Pepper	2,059	1,872	2,544	2,416	90	83	...	...
3.—Ginger	2,091	1,089	3,181	1,172	...	...	...	...
4.—Chillies	5,839	3,818	6,298	2,723	...	...	651	95
5.—Cardamoms	959	1,072	429	665	...	...	530	409
6.—Others	1,791	899	1,476	682	...	...	315	177
<b>Stone and lime</b>	3,26,008	48,532	4,14,981	58,743	88,973	10,211	...	...
<b>Sugar—</b>								
1.—Refined	16,326	5,630	19,939	7,920	3,613	1,990	...	...
2.—Unrefined	1,53,225	26,567	1,67,110	28,971	13,784	2,341	...	...
<b>Tea—</b>								
1.—Foreign	1	1	...	...	...	...	1	1
2.—Indian	4,926	3,949	5,609	2,856	883	...	...	1,003
<b>Timber</b>	55,064	9,650	72,078	18,420	17,014	2,770	...	...
<b>Tobacco</b>	44,950	17,391	40,020	19,108	...	1,807	4,924	...
<b>Wool, Raw</b>	2,276	1,792	908	499	...	...	1,368	1,293
<b>Wool manufactured—</b>								
1.—Piece-goods, European	959	1,091	585	2,200	...	209	191	...
2.—" " Indian	5,184	6,986	4,373	5,357	...	...	811	1,599
3.—Shawls	...	...	...	...	...	...	...	...
<b>All other articles of merchandise—</b>								
1.—Firewood	16,695	1,308	10,865	751	...	...	6,070	552
2.—Indigo seed	18,060	8,728	16,532	7,093	...	...	2,308	1,635
3.—Mowah flower	24,080	4,124	17,476	2,805	...	...	6,613	1,319
4.—Oil-cake	74,052	12,696	41,919	5,673	...	...	32,133	6,963
5.—Paints & colours	6,521	2,612	11,016	3,998	4,495	1,366	...	...
6.—Seeds other than oilseeds	40,477	18,336	30,468	11,926	...	...	1,009	6,411
7.—Wooden articles	19,369	8,063	17,091	7,011	...	...	2,271	1,652
8.—Others	5,85,201	2,30,525	7,61,629	2,49,911	1,76,428	19,386	...	...
<b>Total</b>	1,14,73,841	28,22,834	1,25,48,540	28,74,960	10,74,705	58,135	...	...
<b>Military stores</b>	21,119	38,074	19,016	21,889	...	...	2,193	10,185
<b>Coal for Railway</b>	8,69,211	73,997	10,65,737	80,735	1,96,526	12,738	...	...
<b>Railway materials</b>	30,30,853	76,582	27,22,748	69,062	...	...	3,08,105	7,530
<b>Live-stock</b>	...	13,249	...	15,521	...	2,272	...	...
<b>Total</b>	1,53,95,024	30,18,736	1,63,56,047	30,68,166	9,61,023	40,430	...	...

T. SIMPSON, Assistant Auditor.

TRAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, the 7th November 1895.



